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MICHIGAN STATISTICAL ABSTRACT

Sixteenth Edition 1981

David I. Verway
Editor

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On 30 June 1981, the Bureau of Business and Economic Research in the Graduate School of Business Administration at Michigan State University was dissolved. I joined the School of Business Administration at Wayne State University on 1 September with the understanding of both universities that as much as possible of my information program would be preserved.

I wish to express deepest appreciation to Richard J. Lewis, Dean, Graduate School of Business Administration, Michigan State University; and John G. Maurer, Dean, School of Business Administration, Wayne State University for their unstinting cooperation in the transition.

About two-thirds of this edition of the *Michigan Statistical Abstract* had been completed by the end of June. Nearly one-third of those tables has been updated again in the interests of providing optimal timeliness of the *Abstract*.

Gail Guip, secretary at the Bureau of Business Research, has borne most of the burden of managing the production of this edition. She and Robin Massey-Rudd typed the tables and most of the narrative completed at Wayne State University.

The other typist at Wayne State University was Cheryl Gambaro. Data were collected by Elena Donadoni, Joan Anning, and Cheryl Gambaro. We all proofread.

At Michigan State University Betty Dicken typed tables from copy prepared by Ali Haji-Mohamad-zadeh, Ercument Aksoy, Arthur M. Gold, Sandra J. Friedle, Kenneth Koupal, and Zohreh Emami-Khoyi. Elizabeth Johnston, Christine O'Connor, Harriett Posner, Georgia Bunt, and Elaine Poshedly proofread.

A host of individuals in government and private organizations contributed time and material. The Bureau of Economic Analysis, Washington, D.C., is the source of income data that appear in several chapters other than chapter VI. The Michigan Employment Security Commission's Research and Statistics Division, in Detroit, was most helpful in securing many of the statistics that appear in chapter V. The Office of Vital and Health Statistics, Michigan Department of Public Health, prepared much of the material for chapter III. The Michigan Agricultural Reporting Service assembled nearly all of the information for chapter XII. The Geological Survey Division, Michigan Department of Natural Resources prepared updated material for chapter XIII. Other cooperating state agencies include the following departments: Management and Budget, Mental Health, Social Services, Education, State, Treasury, State Police, Licensing and Regulation, and Commerce.

Two libraries, the Documents Section of the Michigan State University library and the Documents Library of the State of Michigan, were most helpful in securing materials. Their contribution is gratefully acknowledged.

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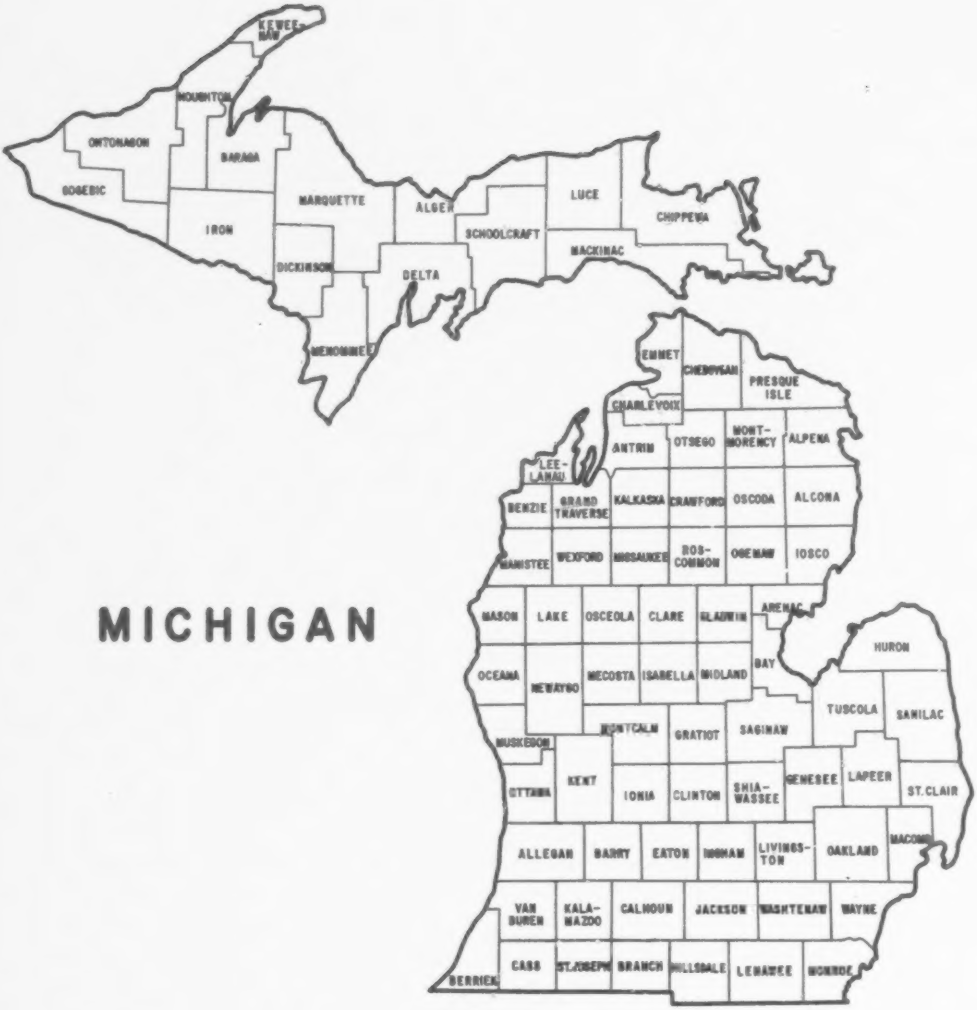
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KEWEENAW
HOUGHTON
ONTONAGON
BARAGA
GOGEBIC
IRON
MARQUETTE
DICKINSON
MENOMINEE
ALGER
DELTA
SCHOOLCRAFT
LUCE
MACKINAC
CHIPPEWA
EMMET
CHEBOYGAN
PRESQUE ISLE
CHARLEVOIX
ANTRIM
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MIDLAND
BAY
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MUSKEGON
MONTCALM
GRATIOT
SAGINAW
OTTAWA
KENT
IONIA
CLINTON
SHIA-WASSEE
GENESEE
LAPEER
ST. CLAIR
ALLEGAN
BARRY
EATON
INGHAM
LIVINGS-TON
OAKLAND
MACOMB
VAN BUREN
KALA-MAZOO
CALHOUN
JACKSON
WASHTENAW
WAYNE
BERRIEN
CASS
ST.JOSEPH
BRANCH
HILLSDALE
LENAWEE
MONROE

PREFACE

This edition has two fewer chapters than the fifteenth. Several tables on travel and recreation which appeared in Chapter XXVI have been updated and now appear in Chapter XI. Tables that could not be updated were dropped. Since there have been few new projections, Chapter XXVII also was deleted. It is anticipated that a chapter on projections will be included in the seventeenth edition.

History buffs will have some interest in the material in the narrative sections of Chapters XVI and XVII.

Those who find this Abstract useful are advised to consult the Economic Report of the Governor, which also appears annually. If offers a good description of the state's economy as well as the most recent economic forecast.

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I. POPULATION

Michigan's population grew at a substantially faster rate than the nation's as a whole during the 1940s, primarily as a result of the lure that factory jobs had for the poor in nearby states and the rural South. By the late 1940s, the demand for workers to operate Michigan's production lines had largely abated: Military production was at a low ebb, and the demand for motor vehicles, delayed by the war, had been spent. In 1950 and 1951, the state's population growth was below the national average.

American involvement in Korea renewed the emphasis on the production of ground combat and supply vehicles, with obvious implications for the demand for factory labor in the Wolverine State. Again, after the cessation of hostilities, there was a large backlog of civilian demand for automobiles, and factories responded accordingly. The Michigan population grew by 15 percent between 1951 and 1956, compared with 9 percent nationally.

The 1956-1962 period was languid, economically, for the nation; it was especially painful for Michigan because of the very low demand for durable goods, particularly motor vehicles. This state's population growth lagged the nation's in each of those six years, the total increase a mere 6.2 percent compared with 10.5 percent nationally.

After 1962, Michigan prospered as the nation recovered economically, began investing in new factories and equipment at record levels, and renewed its love for the motor car. The expanding conflict in Vietnam depended less on ground vehicles than on air power, ships, and explosives. Michigan, no longer the "arsenal of Democracy," as it was known during World War II, nevertheless enjoyed a high level of prosperity and offered well-paying factory jobs. Manufacturers, as they had during the 1940s and again during the Korean War and its aftermath, even recruited labor. particularly from southern states, to keep the production lines humming. Between 1962 and 1967, Michigan's population grew by 8.8 percent, the nation's by 6.3 percent.

By and large, Michigan's economy has grown less rapidly than the national average since the mid-1960s. There has been a de-emphasis of industries in which this state specializes, and some low-skill jobs have been lost to the South, where labor is less expensive. The combination of slack demand here and increased job availability below the Mason-Dixon line has, to a considerable extent, stanched the inflow of relatively unskilled labor.

Since 1930, census day has been 1 April; in 1920 it was 1 January, and in 1910 it was 15 April. Between 1830 and 1900, census day was 1 June. For 1820, the first census day was 7 August.

Apportionment of the U.S. House of Representatives is based on population, hence the constitutional mandate to conduct a census of the nation's inhabitants every ten years. The size of the population, or certain components thereof, also is an important factor in the distribution of various federal monies to states and local units of government, as well as of state monies to local units. The issuance of liquor licenses and other types of business permits is based on population. Businesses apply population data to developing marketing strategies.

Despite the best efforts on the part of organizations inside and outside government, some people are not counted. Individuals are missed in the decennial censuses because they have no regular domicile where they can be reached, they fail to report the fact of their existence to authorities either deliberately or through ignorance, or they intentionally elude the census for one reason or another.

Urban and rural were redefined in 1950. According to the current definition, the urban population comprises all persons living in (1) a place of 2,500 inhabitants or more incorporated as a city, borough, or village; (2) the densely populated, settled urban fringe, including both incorporated and unincorporated places, around cities of 50,000 or more; and (3) unincorporated places of 2,500 inhabitants or more, and in other areas classified as urban under special rules relating to population size and density. The rural population is that remaining of the total after the above definition is applied. Table I-2 lists all incorporated places in Michigan along with those not incorporated but having a population of 1,000 or more. Numerous places, such as Ada in Kent County and Temperance in Monroe County, are listed by the Department of State Highways -- for example, on the Official Highway Map -- as places of 1,000 or more, but are not listed in the Census of Population. Only places recognized by the census are listed in Table I-2.

The Census Bureau also estimates the population of states for intercensal years. These estimates, reproduced in Table I-1, are based upon formulas that incorporate data on known births and deaths, school enrollments, automobile registration, and other factors thought to reflect population. Other techniques are used to produce estimates of net population flows, that is, net migration statistics, which are shown in Table I-5.

The Bureau of the Census also uses the decennial Census of Population to collect a multitude of statistics on sex, age, household relationships, employment, income, and so forth. They are derived from answers to the relevant questions on census forms sent to every household, that is, the same forms used for the population count itself. Data on the housing stock are also collected (see chapter II).

"Persons of Spanish language" is a census term that applies to all individuals in families in which at least one parent claims Spanish as the mother tongue, and to unrelated individuals who speak Spanish as a first language. "Persons of Spanish origin" designates people whose heritage is Mexican, Puerto Rican, Cuban, Central or South American, or "other Spanish." Data on persons of Spanish language were derived from the 15 percent sample of households, and those pertaining to persons of Spanish origin from the 5 percent sample. In counties or other subdivisions for which these samples indicate fewer than 400 Spanish-speaking members, data are not published due to statistical unreliability.

A person is classified as white if both parents are white. The race of a person with one white parent is the same as the race of the other parent. The race of the father is used to classify persons whose race is in doubt and persons neither of whose parents is white. The race of a household or family depends on the race of the head. A family classified as Spanish language is one whose head, or wife of head, claims Spanish as the mother tongue.

I. POPULATION

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TABLE I-1. INTERCENSAL ESTIMATES OF THE TOTAL RESIDENT AND CIVILIAN POPULATION OF MICHIGAN AND THE UNITED STATES: 1 JULY 1950-1980

(In thousands)

	Civilian population			Total population[a]		
Year	Michigan	United States[b]		Michigan	United States[b]	
1950	6,397	150,790		6,407	151,868	
1951	6,476	151,599		6,497	153,982	
1952	6,627	153,892		6,650	156,393	
1953	6,806	156,595		6,822	158,956	
1954	7,053	159,695		7,066	161,884	
1955	7,270	162,967		7,285	165,069	
1956	7,452	166,055		7,467	168,088	
1957	7,554	169,110		7,569	171,187	
1958	7,652	172,226		7,667	174,149	
1959	7,750	175,277		7,767	177,135	
1960	7,818	178,136		7,834	179,975	
1961	7,871	181,123		7,893	182,973	
1962	7,909	183,644		7,933	185,738	
1963	8,034	186,448		8,058	188,438	
1964	8,164	189,085		8,187	191,085	
1965	8,336	191,539		8,357	193,460	
1966	8,492	193,345		8,512	195,501	
1967	8,610	195,181		8,630	197,374	
1968	8,677	197,026		8,696	199,312	
1969	8,765	199,067		8,781	201,306	
1970	8,880	201,722	201,895[c]	8,895	203,810	203,984[c]
1971	8,950	204,258	204,866[c]	8,965	206,219	206,827[c]
1972	9,000	206,461	207,511[c]	9,015	208,234	209,284[c]
1973	9,045	208,102	209,600[c]	9,060	209,859	211,357[c]
1974	9,081	209,683	211,636[c]	9,094	211,389	213,342[c]
1975	9,078	211,373	213,788[c]	9,092	213,051	215,465[c]
1976	9,086	213,011	215,894[c]	9,100	214,680	217,563[c]
1977	9,125	214,746	218,106[c]	9,138	216,400	219,760[c]
1978	9,170	216,600	220,467[c]	9,181	218,228	222,095[c]
1979	9,197	218,497	222,969[c]	9,207	220,099	224,567[c]
1980	--	--	225,552[c]	--	--	227,158[c]

SOURCE: Bureau of the Census, Current Population Reports, Series P-25, no. 72 (Washington, D.C.: 1953); no. 304 (1965); no. 460 (1971); no. 468 (1971); no. 876 (1980); and 903 (1981).

a. Figures exclude members of the armed forces stationed abroad.
b. U.S. figures exclude Alaska and Hawaii prior to 1950.
c. U.S. figures revised in light of 1980 Census of Population. Revised Michigan figures are not available

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVING 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980

Place	County	Population				Percentage change
		1950	1960	1970	1980	1970-1980
Addison (V)	Lenawee	488	575	595	655	10.1
Adrian (C)	Lenawee	18,393	20,347	20,382	21,186	3.9
Ahmeek (V)	Keweenaw	360	265	238	210	-11.8
Akron (V)	Tuscola	431	503	525	538	2.5
Alanson (V)	Emmet	319	290	362	508	40.3
Albion (C)	Calhoun	10,406	12,749	12,112	11,059	-8.7
Algonac (C)	St. Clair	2,639	3,190	3,684	4,412	19.8
Allegan (C)	Allegan	4,801	4,822	4,516	4,576	1.3
Allen (V)	Hillsdale	n.d.	325	385	266	-30.9
Allen Park (C)	Wayne	12,329	37,494	40,747	34,196	-16.8
Alma (C)	Gratiot	8,341	8,978	9,611	9,652	0.5
Almont (V)	Lapeer	1,035	1,279	1,634	1,857	13.6
Alpena (C)	Alpena	13,135	14,682	13,805	12,214	-11.5
Alpha (V)	Iron	378	317	282	229	-18.8
Anchor Bay Grdns (U)	Macomb	1,127	1,830	2,272	n.a.	n.a.
Ann Arbor (C)	Washtenaw	48,521	67,340	100,035	107,316	7.3
Applegate (V)	Sanilac	244	252	301	257	-14.6
Armada (V)	Macomb	961	1,111	1,352	1,392	3.0
Ashley (V)	Gratiot	449	448	521	570	9.4
Athens (V)	Calhoun	768	966	996	960	-3.6
Auburn (C)	Bay	869	1,497	1,919	1,921	0.1
Au Gres (C)	Arenac	442	584	564	768	36.2
Augusta (V)	Kalamazoo	898	972	1,025	913	-10.9
Bad Axe (C)	Huron	2,973	2,998	2,999	3,184	6.2
Baldwin (V)	Lake	835	835	612	674	10.1

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVING 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980 (cont.)

Place	County	Population				Percentage change
		1950	1960	1970	1980	1970-1980
Bancroft (V)	Shiawassee	615	636	724	618	-14.6
Bangor (C)	Van Buren	1,694	2,109	2,050	2,001	-2.4
Baraga (V)	Baraga	942	991	1,116	1,055	-5.5
Baroda (V)	Berrien	344	488	504	627	24.4
Barryton (V)	Mecosta	445	418	368	422	14.7
Barton Hills (V)	Washtenaw	n.d.	n.d.	390	357	-8.5
Battle Creek (C)	Calhoun	48,666	44,169	38,931	35,724	-8.2
Bay City (C)	Bay	52,523	53,604	49,449	41,593	-15.9
Bayport (U)	Genesee	1,209	1,569	2,101	n.a.	n.a.
Bear Lake (V)	Manistee	364	323	376	388	3.2
Beaverton (C)	Gladwin	794	926	954	1,025	7.4
Beechwood (U)	Ottawa	1,567	2,323	2,714	n.a.	n.a.
Belding (C)	Ionia	4,436	4,887	5,121	5,634	10.0
Bellaire (V)	Antrim	693	689	897	1,063	18.5
Belleville (C)	Wayne	1,722	1,921	2,406	3,366	39.9
Bellevue (V)	Eaton	1,168	1,277	1,297	1,289	-0.6
Benton Central (U)	Berrien	n.d.	n.d.	8,067	n.a.	n.a.
Benton Harbor (C)	Berrien	18,769	19,136	16,481	14,707	-10.8
Benton South (U)	Berrien	n.d.	n.d.	4,496	n.a.	n.a.
Benzonia (V)	Benzie	407	407	412	465	12.9
Berkley (C)	Oakland	17,931	23,275	21,879[a]	18,637	-14.8
Berrien Springs (V)	Berrien	1,761	1,953	1,951	2,042	4.7
Bessemer (C)	Gogebic	3,509	3,304	2,805	2,553	-9.0
Beulah (V)	Benzie	458	436	461	454	-1.5
Beverly Hills (V)	Oakland	n.d.	8,633	13,598	11,598	-14.7

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVING 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980 (cont.)

Place	County	Population				Percentage change
		1950	1960	1970	1980	1970-1980
Big Rapids (C)	Mecosta	6,736	8,686	11,995	14,361	19.7
Bingham Farms (V)	Oakland	n.d.	394	566	529	-6.5
Birch Run (V)	Saginaw	n.d.	844	932	1,196	28.3
Birmingham (C)	Oakland	15,467	25,525	26,170	21,689	-17.1
Blissfield (V)	Lenawee	2,365	2,653	2,753	3,107	12.9
Bloomfield Hills (C)	Oakland	1,468	2,378	3,672	3,985	8.5
Bloomingdale (V)	Van Buren	465	471	496	537	8.3
Boyne City (C)	Charlevoix	3,028	2,797	2,969	3,348	12.8
Boyne Falls (V)	Charlevoix	236	260	347	378	8.9
Breckenridge (V)	Gratiot	985	1,131	1,257	1,495	18.9
Breedsville (V)	Van Buren	239	245	209	244	16.7
Bridgman (C)	Berrien	977	1,454	1,621	2,235	37.9
Brighton (C)	Livingston	1,861	2,282	2,457	4,268	73.7
Britton (V)	Lenawee	517	622	697	693	-0.6
Bronson (C)	Branch	2,106	2,267	2,390	2,271	-5.0
Brooklyn (V)	Jackson	862	986	1,112	1,110	-0.2
Brown City (C)	Sanilac	878	993	1,142	1,158	1.4
Brownlee Park (U)	Calhoun	n.d.	3,307	2,985	n.a.	n.a.
Buchanan (C)	Berrien	5,224	5,341	4,645	5,142	10.7
Buckley (V)	Wexford	194	247	244	357	46.3
Bunny Run (U)	Oakland	n.d.	1,058	1,391	n.a.	n.a.
Burlington (V)	Calhoun	329	366	314	367	16.9
Burr Oak (V)	St. Joseph	814	867	873	853	-2.3
Burton (C)	Genesee	n.d.	n.d.	32,540	29,976	-7.9
Byron (V)	Shiawassee	439	542	655	689	5.2

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVING 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980 (cont.)

		Population				Percentage change
Place	County	1950	1960	1970	1980	1970-1980
Cadillac (C)	Wexford	10,425	10,112	9,990	10,199	2.1
Caledonia (V)	Kent	619	739	716	722	0.8
Calumet (V)	Houghton	1,256	1,139	1,007	1,013	0.6
Camden (V)	Hillsdale	380	434	405	420	3.7
Capac (V)	St. Clair	1,104	1,235	1,279	1,377	7.7
Carleton (V)	Monroe	1,039	1,379	1,503	2,786	85.4
Caro (V)	Tuscola	3,464	3,534	4,028	4,317	7.2
Carrollton (U)	Saginaw	n.d.	n.d.	7,300	n.a.	n.a.
Carson City (C)	Montcalm	1,168	1,201	1,217	1,229	1.0
Carsonville (V)	Sanilac	487	502	621	622	0.2
Caseville (V)	Huron	482	659	607	851	40.2
Casnovia (V)	Kent & Muskegon	312	371	403	348	-13.6
Caspian (C)	Iron	1,608	1,493	1,165	1,038	-10.9
Cass City (V)	Tuscola	1,762	1,945	1,974	2,258	14.4
Cassopolis (V)	Cass	1,527	2,027	2,108	1,933	-8.3
Cedar Springs (C)	Kent	1,378	1,768	1,807	2,615	44.7
Cement City (V)	Jackson & Lenawee	n.d.	471	531	539	1.5
Center Line (C)	Macomb	7,659	10,164	10,379	9,293	-10.5
Central Lake (V)	Antrim	692	692	741	895	20.8
Centreville (V)	St. Joseph	879	971	1,044	1,202	15.1
Charlevoix (C)	Charlevoix	2,695	2,751	3,519	3,296	-6.3
Charlotte (C)	Eaton	6,606	7,657	8,244	8,251	0.1
Chatham (V)	Alger	n.d.	n.d.	246	315	28.0
Cheboygan (C)	Cheboygan	5,687	5,859	5,553	5,106	-8.0
Chelsea (V)	Washtenaw	2,580	3,355	3,858	3,816	-1.1

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVING 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980 (cont.)

Place	County	Population				Percentage change
		1950	1960	1970	1980	1970-1980
Chesaning (V)	Saginaw	2,264	2,770	2,876	2,656	-7.6
Clair Haven (U)	Macomb	n.d.	1,364	2,177	n.a.	n.a.
Clair Haven W. (U)	Macomb	n.d.	n.d.	1,367	n.a.	n.a.
Clare (C)	Clare	2,440	2,442	2,639	3,300	25.0
Clarkston (V)	Oakland	722	769	1,034	968	-6.3
Clarksville (V)	Ionia	339	371	346	348	0.6
Clawson (C)	Oakland	5,196	14,795	17,617	15,103	-14.3
Clayton (V)	Lenawee	467	470	505	396	-21.6
Clifford (V)	Lapeer	330	389	472	406	-14.0
Climax (V)	Kalamazoo	524	587	594	619	4.2
Clinton (V)	Lenawee	1,344	1,481	1,677	2,342	39.7
Clio (C)	Genesee	1,963	2,212	2,357	2,669	13.2
Coldwater (C)	Branch	8,594	8,880	9,155[a]	9,461	3.3
Coleman (C)	Midland	1,024	1,264	1,295	1,429	10.3
Coloma (C)	Berrien	1,041	1,473	1,814	1,833	1.0
Colon (V)	St. Joseph	1,000	1,055	1,172	1,190	1.5
Columbiaville (V)	Lapeer	789	878	935	953	1.9
Comstock (U)	Kalamazoo	n.d.	n.d.	5,003	n.a.	n.a.
Comstock Park (U)	Kent	n.d.	n.d.	5,766	n.a.	n.a.
Concord (V)	Jackson	730	990	983	900	-8.4
Constantine (V)	St. Joseph	1,514	1,710	1,733	1,680	-3.1
Coopersville (C)	Ottawa	1,371	1,584	2,129	2,889	35.7
Copemish (V)	Manistee	255	232	237	287	21.1
Copper City (V)	Houghton	336	293	252	244	-3.2
Corunna (C)	Shiawassee	2,358	2,764	2,829	3,206	13.3

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVING 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980 (cont.)

Place	County	Population				Percentage change
		1950	1960	1970	1980	1970-1980
Croswell (C)	Sanilac	1,775	1,817	1,954	2,073	6.1
Crystal Falls (C)	Iron	2,316	2,203	2,000	1,965	-1.8
Custer (V)	Mason	260	365	320	341	6.6
Cutlerville (U)	Kent	n.d.	n.d.	6,267	n.a.	n.a.
Daggett (V)	Menominee	341	296	366	274	-25.1
Dansville (V)	Ingham	433	453	486	479	-1.4
Davison (C)	Genesee	1,745	3,761	5,259	6,087	15.7
Dearborn (C)	Wayne	94,994	112,007	104,199	90,660	-13.0
Dearborn Heights (C)	Wayne	n.d.	n.d.	80,069	67,706	-15.4
Decatur (V)	Van Buren	1,664	1,827	1,764	1,915	8.6
Deckerville (V)	Sanilac	719	798	817	887	8.6
Deerfield (V)	Lenawee	725	866	834	957	14.7
De Tour (V)	Chippewa	611	669	494	466	-5.7
Detroit (C)	Wayne	1,849,568	1,670,144	1,514,063	1,203,339	-20.5
Detroit Beach (U)	Monroe	n.d.	1,571	2,053	n.a.	n.a.
De Witt (C)	Clinton	824	1,238	1,829	3,165	73.0
Dexter (V)	Washtenaw	1,307	1,702	1,729	1,524	-11.9
Dimondale (V)	Eaton	774	866	970	1,008	3.9
Douglas (V)	Allegan	447	602	813	948	16.6
Dowagiac (C)	Cass	6,542	7,208	6,583	6,307	-4.2
Drayton Plains (U)	Oakland	n.d.	n.d.	16,462	n.a.	n.a.
Dryden (V)	Lapeer	476	531	654	650	-0.6
Dundee (V)	Monroe	1,975	2,377	2,472	2,575	4.2
Durand (C)	Shiawassee	3,194	3,312	3,678	4,238	15.2
Eagle (V)	Clinton	145	141	175	155	-11.4

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVING 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980 (cont.)

Place	County	Population 1950	1960	1970	1980	Percentage change 1970-1980
East Detroit (C)	Macomb	21,461	45,756	45,920	38,280	-16.6
East Grand Rapids (C)	Kent	6,403	10,924	12,565	10,914	-13.1
East Jordan (C)	Charlevoix	1,779	1,919	2,041	2,185	7.1
East Kingsford (U)	Dickinson	n.d.	1,063	1,155	n.a.	n.a.
East Lake (V)	Manistee	376	436	512	514	0.4
East Lansing (C)	Ingham	20,325	30,198	47,540	48,309	1.6
East Tawas (C)	Iosco	2,040	2,462	2,372	2,584	8.9
Eastwood (U)	Kalamazoo	n.d.	n.d.	9,682	n.a.	n.a.
Eaton Rapids (C)	Eaton	3,509	4,052	4,494	4,510	0.4
Eau Claire (V)	Berrien	480	562	527	567	7.6
Ecorse (C)	Wayne	17,948	17,328	17,515	14,447	-17.5
Edmore (V)	Montcalm	971	1,234	1,149	1,176	2.3
Edwardsburg (V)	Cass	616	902	1,107	1,135	2.5
Elberta (V)	Benzie	850	552	542	558	3.0
Elk Rapids (V)	Antrim	889	1,015	1,249	1,504	20.4
Elkton (V)	Huron	854	1,014	973	953	-2.1
Ellsworth (V)	Antrim	369	386	362	436	20.4
Elsie (V)	Clinton	911	933	988	1,022	3.4
Emmet (V)	St. Clair	230	283	297	285	-4.0
Empire (V)	Leelanau	251	448	409	340	-16.9
Escanaba (C)	Delta	15,170	15,391	15,368	14,355	-6.6
Essexville (C)	Bay	3,167	4,590	4,990	4,378	-12.3
Estral Beach (V)	Monroe	188	254	419	463	10.5
Evart (C)	Osceola	1,578	1,775	1,707	1,945	13.9
Fairgrove (V)	Tuscola	570	609	629	691	9.9

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVING 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980 (cont.)

Place	County	Population 1950	Population 1960	Population 1970	Population 1980	Percentage change 1970-1980
Fair Plain (U)	Berrien	4,234	3,744	3,680	n.a.	n.a.
Farmington (C)	Oakland	2,325	6,881	10,329[a]	11,022	6.7
Farmington Hills (C)	Oakland	n.d.	n.d.	48,694	58,056	19.2
Farwell (V)	Clare	694	737	777	804	3.5
Fennville (C)	Allegan	639	705	811	934	15.2
Fenton (C)	Genesee	4,226	6,142	8,284	8,098	-2.2
Ferndale (C)	Oakland	29,675	31,347	30,850	26,227	-15.0
Ferrysburg (C)	Ottawa	n.d.	n.d.	2,196	2,440	11.1
Fife Lake (V)	Grand Traverse	347	218	274	402	46.7
Flat Rock (C)	Wayne	1,931	4,696	5,643	6,853	21.4
Flint (C)	Genesee	163,143	196,940	193,317	159,611	-17.4
Flushing (C)	Genesee	2,226	3,761	7,190	8,624	19.9
Forestville (V)	Sanilac	124	121	110	159	44.5
Fountain (V)	Mason	247	194	156	195	25.0
Fowler (V)	Clinton	675	854	1,020	1,021	0.1
Fowlerville (V)	Livingston	1,466	1,674	1,978	2,289	15.7
Frankenmuth (C)	Saginaw	1,208	1,728	2,834	3,753	32.4
Frankfort (C)	Benzie	1,605	1,690	1,660	1,603	-3.4
Franklin (V)	Oakland	n.d.	2,262	3,311	2,864	-13.5
Fraser (C)	Macomb	1,379	7,027	11,868	14,560	22.7
Freeland (U)	Saginaw	n.d.	n.d.	1,303	n.a.	n.a.
Freeport (V)	Barry	452	495	501	479	-4.4
Freesoil (V)	Mason	208	209	186	212	14.0
Fremont (C)	Newaygo	3,056	3,384	3,465	3,672	6.0
Fruitport (V)	Muskegon	638	1,037	1,409	1,143	-18.9

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVING 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980 (cont.)

Place	County	Population				Percentage change
		1950	1960	1970	1980	1970-1980
Gaastra (C)	Iron	575	582	479	404	-15.7
Gagetown (V)	Tuscola	401	376	408	428	4.9
Gaines (V)	Genesee	352	387	408	440	7.8
Galesburg (C)	Kalamazoo	1,200	1,410	1,355	1,822	34.5
Galien (V)	Berrien	610	750	691	692	0.1
Garden (V)	Delta	399	380	336	296	-11.9
Garden City (C)	Wayne	9,012	38,017	41,864	35,640	-14.9
Gaylord (C)	Otsego	2,271	2,568	3,012	3,011	0
Gibraltar (C)	Wayne	n.d.	2,196	3,842[a]	4,458	16.0
Gladstone (C)	Delta	4,831	5,267	5,237	4,533	-13.4
Gladwin (C)	Gladwin	1,878	2,226	2,071	2,479	19.7
Gobles (C)	Van Buren	622	816	801	816	1.9
Goodrich (V)	Genesee	n.a.	701	774	795	2.7
Grand Beach (V)	Berrien	105	86	165	227	37.6
Grand Blanc (C)	Genesee	998	1,565	5,132	6,848	33.4
Grand Haven (C)	Ottawa	9,536	11,066	11,844	11,763	-0.7
Grand Ledge (C)	Eaton	4,506	5,165	6,032	6,920	14.7
Grand Rapids (C)	Kent	176,515	177,313	197,649	181,843	-8.0
Grandville (C)	Kent	2,022	7,975	10,764	12,412	15.3
Grant (C)	Newaygo	646	732	772	683	-11.5
Grass Lake (V)	Jackson	878	1,037	1,061	962	-9.3
Grayling (C)	Crawford	2,066	2,015	2,143	1,792	-16.4
Greenville (C)	Montcalm	6,668	7,440	7,493	8,019	7.0
Grosse Ile (U)	Wayne	n.d.	n.d.	8,306[a]	n.a.	n.a.
Grosse Pointe (C)	Wayne	6,283	6,631	6,637	5,901	-11.1

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVING 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980 (cont.)

Place	County	Population 1950	1960	1970	1980	Percentage change 1970-1980
Grosse Pt. Farms (C)	Wayne	9,410	12,172	11,701	10,551	-9.8
Grosse Pt. Park (C)	Wayne	13,075	15,457	15,641	13,639	-12.8
Grosse Pt. Shrs (V)	Wayne & Macomb	1,032	2,301	3,042	3,122	2.6
Grosse Pt. Woods (C)	Wayne	10,381	18,580	21,878	18,886	-13.7
Gwinn (U)	Marquette	n.d.	1,009	1,054	n.a.	n.a.
Hamtramck (C)	Wayne	43,355	34,137	26,783	21,300	-20.5
Hancock (C)	Houghton	5,223	5,022	4,820	5,122	6.3
Hanover (V)	Jackson	377	449	513	490	-4.5
Harbor Beach (C)	Huron	2,349	2,282	2,134	2,000	-6.3
Harbor Springs (C)	Emmet	1,626	1,433	1,662	1,567	-5.7
Harper Woods (C)	Wayne	9,148	19,995	20,186	16,361	-18.9
Harrietta (V)	Wexford	152	119	132	139	5.3
Harrison (C)	Clare	884	1,072	1,460	1,700	16.4
Harrisville (C)	Alcona	485	487	541	559	3.3
Hart (C)	Oceana	2,172	1,990	2,139	1,888	-11.7
Hartford (C)	Van Buren	1,838	2,305	2,508	2,493	-0.6
Hastings (C)	Barry	6,096	6,375	6,501	6,418	-1.3
Hazel Park (C)	Oakland	17,770	25,631	23,784	20,914	-12.1
Hersey (V)	Osceola	239	246	276	364	31.9
Hesperia (V)	Newaygo & Oceana	760	822	877	876	-0.1
Highland Park (C)	Wayne	46,393	38,063	35,444	27,909	-21.3
Hillman (V)	Montmorency	442	445	366	373	1.9
Hillsdale (C)	Hillsdale	7,297	7,629	7,728	7,432	-3.8
Holland (C)	Allegan & Ottawa	15,858	24,777	26,479	26,281	-0.7
Holly (V)	Oakland	2,663	3,269	4,355	4,874	11.9

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVING 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980 (cont.)

Place	County	Population				Percentage change
		1950	1960	1970	1980	1970-1980
Holt (U)	Ingham	n.d.	4,818	6,980	n.a.	n.a.
Homer (V)	Calhoun	1,301	1,629	1,617	1,791	10.8
Honor (V)	Benzie	269	278	282	281	-0.4
Hopkins (V)	Allegan	531	556	566	536	-5.3
Houghton (C)	Houghton	3,829	3,393	6,067	7,512	23.8
Houghton Lake Hts. (U)	Roscommon	n.d.	1,195	1,252	n.a.	n.a.
Howard City (V)	Montcalm	791	1,004	1,060	1,118	5.5
Howell (C)	Livingston	4,353	4,861	5,224	6,976	33.5
Hubbardston (V)	Clinton & Ionia	335	381	403	421	4.5
Hubbell (U)	Houghton	1,690	1,429	1,251	n.a.	n.a.
Hudson (C)	Lenawee	2,773	2,546	2,618	2,545	-2.8
Hudsonville (C)	Ottawa	1,101	2,649	3,523	4,844	37.5
Huntington Woods (C)	Oakland	4,949	8,746	8,536	6,937	-18.7
Imlay City (C)	Lapeer	1,654	1,968	1,980	2,495	26.0
Inkster (C)	Wayne	16,728	39,097	38,595	35,190	-8.8
Ionia (C)	Ionia	6,412	6,754	6,361	5,920	-6.9
Iron Mountain (C)	Dickinson	9,679	9,299	8,702	8,341	-4.1
Iron River (C)	Iron	4,048	3,754	2,684	2,426	-9.6
Ironwood (C)	Gogebic	11,466	10,265	8,711	7,741	-11.1
Ishpeming (C)	Marquette	8,962	8,857	8,245	7,538	-8.6
Ithaca (C)	Gratiot	2,377	2,611	2,749	2,950	7.3
Jackson (C)	Jackson	51,088	50,720	45,484	39,739	-12.6
Jenison (U)	Ottawa	n.d.	n.d.	11,266	n.a.	n.a.
Jonesville (V)	Hillsdale	1,594	1,896	2,081	2,172	4.4
Kalamazoo (C)	Kalamazoo	57,704	82,089	85,555	79,772	-6.8

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVING 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980 (cont.)

Place	County	Population				Percentage change 1970-1980
		1950	1960	1970	1980	
Kaleva (V)	Manistee	346	348	377	445	18.0
Kalkaska (V)	Kalkaska	1,250	1,321	1,475	1,654	12.1
Keego Harbor (C)	Oakland	n.d.	2,761	3,092	3,083	-0.3
Kent City (V)	Kent	506	617	686	860	25.4
Kentwood (C)	Kent	n.d.	n.d.	20,310	30,438	49.9
Kincheloe (U)	Chippewa	n.d.	n.d.	6,331	n.a.	n.a.
Kinde (V)	Huron	571	624	618	600	-2.9
Kingsford (C)	Dickinson	5,038	5,084	5,276	5,290	0.3
Kingsley (V)	Grand Traverse	425	586	632	664	5.1
Kingston (V)	Tuscola	371	456	464	417	-10.1
K I Sawyer (U)	Marquette	n.d.	n.d.	8,224[a]	n.a.	n.a.
Laingsburg (C)	Shiawassee	942	1,057	1,159	1,145	-1.2
Lake Angelus (V)	Oakland	123	231	573	397	-30.7
Lake Ann (V)	Benzie	99	106	172	235	36.6
Lake City (C)	Missaukee	719	718	704	843	19.7
Lake Linden (V)	Houghton	1,462	1,314	1,214	1,181	-2.7
Lake Mich. Beach (U)	Berrien	n.d.	1,092	1,201	n.a.	n.a.
Lake Odessa (V)	Ionia	1,596	1,806	1,924	2,171	12.8
Lake Orion (V)	Oakland	2,385	2,698	2,921	2,907	-0.5
Lake Orion Hts. (U)	Oakland	1,075	1,918	2,552	n.a.	n.a.
Lakeview (U)	Calhoun	n.d.	10,384	11,391	n.a.	n.a.
Lakeview (V)	Montcalm	975	1,126	1,118	1,139	1.9
Lakewood Club (V)	Muskegon	n.d.	n.d.	590	695	17.8
Lambertville (U)	Monroe	n.a.	1,168	5,721	n.a.	n.a.
L'Anse (V)	Baraga	2,376	2,397	2,538	2,500	-1.5

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVING 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980 (cont.)

Place	County	Population 1950	Population 1960	Population 1970	Population 1980	Percentage change 1970-1980
Lansing (C)	Clinton-Eaton Ingham	92,129	107,807	131,403	130,414	-0.8
Lapeer (C)	Lapeer	6,143	6,160	6,314	6,225	-1.4
Lapeer Heights (U)	Genesee	n.d.	n.d.	7,130	n.a.	n.a.
Lathrup Village (C)	Oakland	n.d.	3,556	4,676[a]	4,639	-0.8
Laurium (V)	Houghton	3,211	3,058	2,868	2,678	-6.6
Lawrence (V)	Van Buren	679	773	790	903	14.3
Lawton (V)	Van Buren	1,206	1,402	1,358	1,558	14.7
Lennon (V)	Genesee & Shiawassee	n.d.	n.d.	624	600	-3.8
Leonard (V)	Oakland	391	359	378	423	11.9
Le Roy (V)	Osceola	243	267	248	293	18.1
Leslie (C)	Ingham	1,543	1,807	1,894	2,110	11.4
Level Pk-Oak Pk (U)	Calhoun	1,364	3,017	3,080	n.a.	n.a.
Lexington (V)	Sanilac	594	722	834	765	-8.3
Lincoln (V)	Alcona	409	441	371	361	-2.7
Lincoln Park (C)	Wayne	29,310	53,933	52,984	45,105	-14.9
Linden (V)	Genesee	933	1,146	1,546	2,174	40.6
Litchfield (C)	Hillsdale	882	993	1,167	1,353	15.9
Livonia (C)	Wayne	17,534	66,702	110,109	104,814	-4.8
Lowell (C)	Kent	2,191	2,545	3,068	3,707	20.8
Ludington (C)	Mason	9,506	9,421	9,021	8,937	-0.9
Luna Pier (C)	Monroe	n.d.	n.d.	1,418	1,443	1.8
Luther (V)	Lake	314	325	320	414	29.4
Lyons (V)	Ionia	683	687	758	708	-6.6
McBain (C)	Missaukee	506	551	520	519	-0.2
McBride (V)	Montcalm	223	265	272	252	-7.4

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVING 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980 (cont.)

Place	County	Population				Percentage change
		1950	1960	1970	1980	1970-1980
Mackinac Island (C)	Mackinac	572	942	517	479	-7.4
Mackinaw City (V)	Cheboygan-Emmet	970	934	810	820	1.2
Madison Heights (C)	Oakland	n.d.	33,343	38,599	35,375	-8.4
Mancelona (V)	Antrim	1,000	1,141	1,255	1,432	14.1
Manchester (V)	Washtenaw	1,388	1,568	1,650	1,686	2.2
Manistee (C)	Manistee	8,642	8,324	7,723	7,566	-2.0
Manistique (C)	Schoolcraft	5,086	4,875	4,324	3,962	-8.4
Manitou Bch-Devils Lake (U)	Lenawee	1,273	1,544	1,892	n.a.	n.a.
Manton (C)	Wexford	1,085	1,050	1,107	1,212	9.5
Maple Rapids (V)	Clinton	645	683	683	683	0
Marcellus (V)	Cass	1,014	1,073	1,139	1,134	-0.4
Marine City (C)	St. Clair	4,270	4,404	4,567	4,414	-3.4
Marion (V)	Osceola	879	898	891	816	-8.4
Marlette (V)	Sanilac	1,489	1,640	1,706	1,761	3.2
Marquette (C)	Marquette	17,202	19,824	21,967	23,288	6.0
Marshall (C)	Calhoun	5,777	6,736	7,253	7,201	-0.7
Martin (V)	Allegan	407	483	502	447	-11.0
Marysville (C)	St. Clair	2,534	4,065	5,610	7,345	30.9
Mason (C)	Ingham	3,514	4,522	5,468	6,019	10.1
Mattawan (V)	Van Buren	n.d.	n.d.	1,569	2,143	36.6
Maybee (V)	Monroe	428	459	485	490	1.0
Mayville (V)	Tuscola	888	896	872	958	9.9
Mecosta (V)	Mecosta	305	303	396	428	8.1
Melvin (V)	Sanilac	204	196	202	171	-15.3
Melvindale (C)	Wayne	9,483	13,089	13,862	12,322	-11.1

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVING 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980 (cont.)

Place	County	Population				Percentage change 1970-1980
		1950	1960	1970	1980	
Memphis (C)	Macomb-St. Clr	800	996	1,121	1,171	4.5
Mendon (V)	St. Joseph	844	867	949	951	0.2
Menominee (C)	Menominee	11,151	11,289	10,748	10,009	-6.0
Merrill (V)	Saginaw	809	963	961	851	-11.4
Mesick (V)	Wexford	359	304	376	374	-0.5
Metamora (V)	Lapeer	390	452	468	552	17.9
Michiana (V)	Berrien	102	135	233	333	42.9
Middleville (V)	Barry	1,047	1,196	1,865	1,797	-3.6
Midland (C)	Bay-Midland	14,285	27,779	35,176	37,250	5.9
Milan (C)	Monroe & Washtenaw	2,768	3,616	3,997	4,182	4.6
Milford (V)	Oakland	1,924	4,323	4,699	5,041	7.3
Millersburg (V)	Presque Isle	281	280	200	231	15.5
Millington (V)	Tuscola	1,043	1,159	1,099	1,237	12.6
Minden (V)	Sanilac	359	369	327	284	-13.1
Mineral Hills (V)	Iron	333	311	234	257	9.8
Monroe (C)	Monroe	21,467	22,968	23,894	23,531	-1.5
Montague (C)	Muskegon	1,530	2,366	2,396	2,332	-2.7
Montgomery (V)	Hillsdale	397	362	404	408	1.0
Montrose (V)	Genesee	937	1,466	1,789	1,706	-4.6
Morenci (C)	Lenawee	1,983	2,053	2,132	2,110	-1.0
Morley (V)	Mecosta	413	445	481	507	5.4
Morrice (V)	Shiawassee	501	530	734	733	-0.1
Mount Clemens (C)	Macomb	17,027	21,016	20,476	18,806	-8.2
Mount Morris (C)	Genesee	2,890	3,484	3,778	3,246	-14.1
Mount Pleasant (C)	Isabella	11,393	14,875	20,504	23,746	15.8

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVING 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980 (cont.)

Place	County	Population 1950	1960	1970	1980	Percentage change 1970-1980
Muir (V)	Ionia	466	610	617	698	13.1
Mulliken (V)	Eaton	411	484	454	550	21.1
Munising (C)	Alger	4,339	4,228	3,677	3,083	-16.2
Muskegon (C)	Muskegon	48,429	46,485	44,631	40,823	-8.5
Muskegon Hts (C)	Muskegon	18,828	19,552	17,304	14,611	-15.6
Nashville (V)	Barry	1,374	1,525	1,558	1,628	4.5
Negaunee (C)	Marquette	6,472	6,126	5,248	5,189	-1.1
Newaygo (C)	Newaygo	1,385	1,447	1,381	1,271	-8.0
New Baltimore (C)	Macomb	2,043	3,159	4,132	5,439	31.6
Newberry (V)	Luce	2,802	2,612	2,334	2,120	-9.2
New Buffalo (C)	Berrien	1,565	2,128	2,784	2,821	1.3
New Era (V)	Oceana	247	403	466	534	14.6
New Haven (V)	Macomb	1,082	1,198	1,855	1,871	0.9
New Lathrop (V)	Shiawassee	459	510	596	646	8.4
Niles (C)	Berrien	13,145	13,842	12,988	13,115	1.0
North Adams (V)	Hillsdale	499	494	574	565	-1.6
North Branch (V)	Lapeer	832	901	932	896	-3.9
North Muskegon (C)	Muskegon	2,424	3,855	4,243	4,024	-5.2
Northport (V)	Leelanau	582	530	594	611	2.9
Northville (C)	Oakland-Wayne	3,240	3,967	5,400	5,698	5.5
Norton Shores (C)	Muskegon	n.d.	n.d.	22,271	22,025	-1.1
Norway (C)	Dickinson	3,258	3,171	3,033	2,919	-3.8
Novi (C)	Oakland	n.d.	6,390	9,668	22,525	133.0
Oakley (V)	Saginaw	333	417	418	412	-1.4
Oak Park (C)	Oakland	5,276	36,632	36,762	31,537	-14.2

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVING 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980 (cont.)

Place	County	Population 1950	1960	1970	1980	Percentage change 1970-1980
Okemos (U)	Ingham	n.d.	n.d.	7,770	n.a.	n.a.
Olivet (C)	Eaton	887	1,185	1,629	1,604	-1.5
Omer (C)	Arenac	321	322	366	403	10.1
Onaway (C)	Presque Isle	1,421	1,388	1,262	1,084	-14.1
Onekama (V)	Manistee	435	469	638	582	-8.8
Onsted (V)	Lenawee	486	526	555	670	20.7
Ontonagon (V)	Ontonagon	2,307	2,358	2,432	2,182	-10.3
Orchard Lk Villg (C)	Oakland	696	1,127	1,487	1,798	20.9
Ortonville (V)	Oakland	702	771	983	1,190	21.1
Oscoda-Au Sable (U)	Iosco	n.d.	n.d.	3,475	n.a.	n.a.
Otisville (V)	Genesee	592	701	724	682	-5.8
Otsego (C)	Allegan	3,990	4,142	3,957	3,802	-3.9
Otter Lake (V)	Lapeer-Genesee	523	562	551	456	-17.2
Ovid (V)	Clinton	1,410	1,505	1,650	1,712	3.8
Owendale (V)	Huron	307	298	312	308	-1.3
Owosso (C)	Shiawassee	15,948	17,006	17,179	16,455	-4.2
Oxford (V)	Oakland	2,305	2,357	2,536	2,746	8.3
Parchment (C)	Kalamazoo	1,179	1,565	2,027	1,817	-10.4
Parma (V)	Jackson	680	770	880	873	-0.8
Patterson Grdns (U)	Monroe	1,548	1,747	2,169	n.a.	n.a.
Paw Paw (V)	Van Buren	2,382	2,970	3,160	3,211	1.6
Paw Paw Lake (U)	Berrien	1,625	3,518	3,726	n.a.	n.a.
Pearl Beach (U)	St. Clair	n.d.	1,224	1,744	n.a.	n.a.
Peck (V)	Sanilac	471	548	580	606	4.5
Pellston (V)	Emmet	442	429	469	565	20.5

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVING 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980 (cont.)

Place	County	Population				Percentage change 1970-1980
		1950	1960	1970	1980	
Pentwater (V)	Oceana	1,097	1,030	993	1,165	17.3
Perrinton (V)	Gratiot	383	424	489	448	-8.4
Perry (C)	Shiawassee	1,203	1,370	1,531	2,051	34.0
Petersburg (C)	Monroe	1,001	1,018	1,227	1,222	-0.4
Petoskey (C)	Emmet	6,468	6,138	6,342	6,097	-3.9
Pewamo (V)	Ionia	432	415	498	488	-2.0
Pierson (V)	Montcalm	169	219	193	216	11.9
Pigeon (V)	Huron	1,015	1,191	1,174	1,247	6.2
Pinckney (V)	Livingston	695	732	921	1,390	50.9
Pinconning (C)	Bay	1,223	1,329	1,320	1,430	8.3
Plainwell (C)	Allegan	2,767	3,125	3,195	3,751	17.4
Pleasant Ridge (C)	Oakland	3,594	3,807	3,989	3,217	-19.4
Plymouth (C)	Wayne	6,637	8,766	11,758	9,986	-15.1
Pontiac (C)	Oakland	73,681	82,233	85,279	76,715	-10.0
Portage (C)	Kalamazoo	n.d.	n.d.	33,590	38,157	13.6
Port Austin (V)	Huron	724	706	883	839	-5.0
Port Hope (V)	Huron	353	349	377	369	-2.1
Port Huron (C)	St. Clair	35,725	36,084	35,794	33,981	-5.1
Portland (C)	Ionia	2,807	3,330	3,817	3,963	3.8
Port Sanilac (V)	Sanilac	247	361	493	598	21.3
Posen (V)	Presque Isle	274	341	339	270	-20.3
Potterville (C)	Eaton	624	1,028	1,280	1,502	17.3
Powers (V)	Menominee	510	415	560	490	-12.5
Prescott (V)	Ogemaw	281	308	306	332	8.5
Quakertown (U)	Oakland	n.a.	482	837	n.a.	n.a.

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVING 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980 (cont.)

Place	County	Population				Percentage change
		1950	1960	1970	1980	1970-1980
Quakertown N. (U)	Oakland	n.d.	n.d.	7,101	n.a.	n.a.
Quincy (V)	Branch	1,527	1,602	1,540	1,569	1.9
Ramsay (U)	Gogebic	n.d.	1,158	1,068	n.a.	n.a.
Ravenna (V)	Muskegon	551	801	1,048	951	-9.3
Reading (C)	Hillsdale	1,125	1,128	1,125	1,203	6.9
Reed City (C)	Osceola	2,241	2,184	2,286	2,221	-2.8
Reese (V)	Tuscola	632	711	1,050	1,645	56.7
Richland (V)	Kalamazoo	389	511	728	486	-33.2
Richmond (C)	Macomb	2,025	2,667	3,234	3,536	9.3
River Rouge (C)	Wayne	20,549	18,147	15,947	12,912	-19.0
Riverview (C)	Wayne	1,432	7,237	11,342	14,569	28.5
Rochester (C)	Oakland	4,279	5,431	7,054	7,203	2.1
Rockford (C)	Kent	1,937	2,074	2,428	3,324	36.9
Rockwood (C)	Wayne	1,044	2,026	3,225[a]	3,346	3.8
Rogers City (C)	Presque Isle	3,873	4,722	4,275	3,923	-8.2
Romeo (V)	Macomb	2,985	3,327	4,012	3,509	-12.5
Romulus (C)	Wayne	n.d.	n.d.	22,879	24,857	8.6
Roosevelt Park (C)	Muskegon	1,254	2,578	4,176	4,015	-3.9
Roscommon (V)	Roscommon	877	867	810	834	3.0
Rosebush (V)	Isabella	n.d.	n.d.	439	336	-23.5
Rose City (C)	Ogemaw	446	435	530	661	24.7
Roseville (C)	Macomb	15,816	50,195	60,529	54,311	-10.3
Rothbury (V)	Oceana	n.d.	n.d.	394	522	32.5
Royal Oak (C)	Oakland	46,898	80,612	86,238[a]	70,893	-17.8
Saginaw (C)	Saginaw	92,918	98,265	91,849	77,508	-15.6

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVING 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980 (cont.)

		Population				Percentage change
Place	County	1950	1960	1970	1980	1970-1980
St. Charles (V)	Saginaw	1,469	1,959	2,046	2,276	11.2
St. Clair (C)	St. Clair	4,098	4,538	4,770	4,780	0.2
St. Clair Shrs (C)	Macomb	19,823	76,657	88,093	76,210	-13.5
St. Ignace (C)	Mackinac	2,946	3,334	2,892	2,632	-9.0
St. Johns (C)	Clinton	4,954	5,629	6,672	7,376	10.6
St. Joseph (C)	Berrien	10,223	11,755	11,042	9,622	-12.9
St. Louis (C)	Gratiot	3,347	3,808	4,101	4,107	0.1
Saline (C)	Washtenaw	1,533	2,334	4,811	6,483	34.8
Sand Lake (V)	Kent	394	394	380	388	2.1
Sandusky (C)	Sanilac	1,819	2,066	2,071	2,216	7.0
Sanford (V)	Midland	n.d.	n.d.	818	864	5.6
Saranac (V)	Ionia	885	1,081	1,223	1,421	16.2
Saugatuck (V)	Allegan	770	927	1,022	1,079	5.6
Sault Ste. Marie (C)	Chippewa	17,912	18,722	15,136	14,448	-4.5
Schoolcraft (V)	Kalamazoo	1,078	1,205	1,277	1,359	6.4
Scottville (C)	Mason	1,142	1,245	1,202	1,341	3.2
Sebewaing (V)	Huron	1,911	2,026	2,053	2,046	-0.3
Selfridge Base (U)	Macomb	n.d.	n.d.	1,614	n.a.	n.a.
Selfridge-Capehart (U)	Macomb	n.d.	n.d.	1,694	n.a.	n.a.
Shelby (V)	Oceana	1,500	1,603	1,703	1,624	-4.6
Shepherd (V)	Isabella	899	1,293	1,416	1,534	8.3
Sheridan (V)	Montcalm	535	606	653	664	1.7
Sherwood (V)	Branch	362	356	400	353	-11.8
Shoreham (V)	Berrien	391	443	666	742	11.4
Shorewood Hills-Flower Hills (U)	Berrien	n.d.	1,330	1,629	n.a.	n.a.

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVING 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980 (cont.)

Place	County	Population				Percentage change
		1950	1960	1970	1980	1970-1980
Southfield (C)	Oakland	n.d.	31,501	69,285	75,568	9.1
Southgate (C)	Wayne	n.d.	29,404	33,909	32,058	-5.5
South Haven (C)	Van Buren	5,629	6,149	6,471	5,943	-8.2
South Lyon (C)	Oakland	1,312	1,753	2,675	5,214	94.9
South Monroe (U)	Monroe	2,275	2,919	3,012	n.a.	n.a.
South Range (V)	Houghton	715	760	898	861	-4.1
South Rockwood (V)	Monroe	n.d.	1,337	1,477	1,353	-8.4
Sparlingville (U)	St. Clair	1,393	1,877	1,845	n.a.	n.a.
Sparta (V)	Kent	2,327	2,749	3,094	3,373	9.0
Spring Arbor (U)	Jackson	n.d.	n.d.	1,832	n.a.	n.a.
Springfield (C)	Calhoun	n.d.	4,605	3,994	5,917	48.1
Springfld Place (U)	Calhoun	n.d.	5,136	4,831	n.a.	n.a.
Spring Lake (V)	Ottawa	1,824	2,063	3,034	2,731	-10.0
Springport (V)	Jackson	598	693	723	675	-6.6
Stambaugh (C)	Iron	1,969	1,876	1,458	1,442	-1.1
Standish (C)	Arenac	1,186	1,214	1,184	1,264	6.8
Stanton (C)	Montcalm	1,123	1,139	1,089	1,315	20.8
Stanwood (V)	Mecosta	189	205	241	209	-13.3
Stephenson (C)	Menominee	791	820	800	967	20.9
Sterling (V)	Arenac	444	470	507	457	-9.9
Sterling Heights (C)	Macomb	n.d.	n.d.	61,365	108,999	77.6
Stevensville (V)	Berrien	480	697	1,107	1,268	14.5
Stockbridge (V)	Ingham	1,098	1,097	1,190	1,213	1.9
Stony Point (U)	Monroe	n.d.	n.d.	1,370	n.a.	n.a.
Sturgis (C)	St. Joseph	7,786	8,915	9,295	9,468	1.9

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVINC 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980 (cont.)

Place	County	Population				Percentage change 1970-1980
		1950	1960	1970	1980	
Sunfield (V)	Eaton	400	626	497	591	18.9
Sunrise Heights (U)	Calhoun	1,094	1,569	1,626	n.a.	n.a.
Suttons Bay (V)	Leelanau	485	421	522	504	-3.4
Swartz Creek (C)	Genesee	n.d.	3,006	4,928	5,013	1.7
Sylvan Lake (C)	Oakland	1,165	2,004	2,219	1,949	-12.2
Tawas City (C)	Iosco	1,441	1,810	1,666	1,967	18.1
Taylor (C)	Wayne	n.d.	n.d.	70,020	77,568	10.8
Tecumseh (C)	Lenawee	4,020	7,045	7,120	7,320	2.8
Takonsha (V)	Calhoun	647	744	739	755	2.2
Thompsonville (V)	Benzie	313	243	312	331	6.1
Three Oaks (V)	Berrien	1,572	1,763	1,750	1,774	1.4
Three Rivers (C)	St. Joseph	6,785	7,092	7,355	7,015	-4.6
Traverse City (C)	Gr. Traverse	16,974	18,432	18,048	15,516	-14.0
Trenton (C)	Wayne	6,222	18,439	24,127	22,762	-5.7
Troy (C)	Oakland	n.d.	19,402	39,419	67,102	70.2
Turner (V)	Arenac	193	206	182	187	2.7
Tustin (V)	Osceola	229	248	230	264	14.8
Twining (V)	Arenac	196	199	198	196	-1.0
Ubly (V)	Huron	743	819	899	862	-4.1
Union City (V)	Branch & Calhoun	1,564	1,669	1,740	1,667	-4.2
Unionville (v)	Tuscola	531	629	647	578	-10.7
Utica (C)	Macomb	1,196	1,454	3,504	5,282	50.7
Vandalia (V)	Cass	360	357	427	447	4.7
Vanderbilt (V)	Otsego	410	509	522	525	0.6
Vassar (C)	Tuscola	2,530	2,680	2,802	2,727	-2.7

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVING 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980 (cont.)

Place	County	Population				Percentage change
		1950	1960	1970	1980	1970-1980
Vermontville (V)	Eaton	707	768	857	832	-2.9
Vernon (V)	Shiawassee	678	754	818	1,008	23.2
Verona Park (U)	Calhoun	1,342	1,884	2,107	n.a.	n.a.
Vicksburg (V)	Kalamazoo	2,171	2,224	2,139	2,224	4.0
Wakefield (C)	Gogebic	3,344	3,231	2,757	2,591	-6.0
Waldron (V)	Hillsdale	427	454	564	570	1.1
Walker (C)	Kent	n.d.	n.d.	11,492	15,088	31.3
Walkerville (V)	Oceana	233	261	319	296	-7.2
Walled Lake (C)	Oakland	n.d.	3,550	3,759	4,748	26.3
Warren (C)	Macomb	727	89,246	179,260	161,134	-10.1
Washington (U)	Macomb	n.d.	n.d.	1,563	n.a.	n.a.
Watervliet (C)	Berrien	1,327	1,818	2,059	1,867	-9.3
Wayland (C)	Allegan	1,591	2,019	2,054	2,023	-1.5
Wayne (C)	Wayne	9,409	16,034	21,054	21,159	0.5
Webberville (V)	Ingham	600	664	1,251	1,535	22.7
Wells (U)	Delta	n.d.	n.d.	1,085	n.a.	n.a.
West Branch (C)	Ogemaw	2,098	2,025	1,912	1,785	-6.6
Westland (C)	Wayne	n.d.	n.d.	86,749	84,603	-2.4
Westphalia (V)	Clinton	459	560	806	896	11.2
Westwood (U)	Kalamazoo	n.d.	n.d.	9,143	n.a.	n.a.
White Cloud (C)	Newaygo	977	1,001	1,044	1,101	5.5
Whitehall (C)	Muskegon	1,819	2,590	3,017	2,856	-5.3
White Lk-Seven Harbrs	Oakland	1,385	2,748	4,504	n.a.	n.a.
White Pigeon (V)	St. Joseph	1,113	1,399	1,455	1,478	1.6
White Pine (U)	Ontonagon	n.d.	n.d.	1,218	n.a.	n.a.

TABLE I-2. POPULATION AND LOCATION OF MICHIGAN INCORPORATED PLACES AND UNINCORPORATED PLACES HAVING 1,000 INHABITANTS OR MORE: CENSUS 1950, 1960, 1970, AND 1980; AND PERCENTAGE CHANGE: 1970-1980 (cont.)

Place	County	Population 1950	1960	1970	1980	Percentage change 1970-1980
Whitmore Lake (U)	Livingston	n.d.	n.d.	2,763	n.a.	n.a.
Whittemore (C)	Iosco	452	460	460	438	-4.8
Williamston (C)	Ingham	2,051	2,214	2,600	2,981	14.7
Wixom (C)	Oakland	n.d.	1,531	2,010	6,705	233.6
Wolf Lake (U)	Muskegon	1,591	2,525	2,258	n.a.	n.a.
Wolverine (V)	Cheboygan	318	292	303	364	20.1
Wolverine Lake (V)	Oakland	n.d.	2,404	4,301	4,968	15.5
Wood Creek Farms	Oakland	n.d.	684	1,090	n.a.	n.a.
Woodhaven (C)	Wayne	n.d.	n.a.	3,566[a]	10,902	205.7
Woodland (V)	Barry	410	374	473	431	-8.9
Woodland Beach (U)	Monroe	n.d.	1,944	2,249	n.a.	n.a.
Wurtsmith (U)	Iosco	n.d.	n.a.	6,932	n.a.	n.a.
Wyandotte (C)	Wayne	36,846	43,519	41,061	34,006	-17.0
Wyoming (C)	Kent	n.d.	45,829	56,560	59,616	5.4
Yale (C)	St. Clair	1,641	1,621	1,505	1,814	20.5
Ypsilanti (C)	Washtenaw	18,302	20,957	29,538	24,031	-18.6
Zeeland (C)	Ottawa	3,075	3,702	4,734	4,764	0.6
Zilwaukee (C)	Saginaw	n.d.	n.d.	2,072	2,201	6.2

SOURCE: Bureau of the Census, special release (1980 data); U.S. Census of Population: 1970, Number of Inhabitants, Michigan (Washington, D.C.: 1971), Final Report PC(1)-A24, Table 6 (1960 and 1970 data); and U.S. Census of Population: 1960, Number of Inhabitants, Michigan (Washington, D.C.: 1961), Final Report PC(1)-24A, Table 8 (1950 data).

a. Corrected for errors found after tabulations were completed.

C: City.

U: Unincorporated.

V: Village.

n.d.: not defined.

n.a.: not available.

TABLE I-3. MICHIGAN'S FASTEST AND SLOWEST GROWING CITIES AND VILLAGES: CENSUS 1970-1980

City	% change	City	% change	City	% change
		Fastest growing			
Wixom	233.6	Michiana	42.9	Grand Blanc	33.4
Woodhaven	205.7	Linden	40.6	Rothburg	32.5
Novi	133.0	Alanson	40.3	Frankenmuth	32.4
South Lyon	94.9	Caseville	40.2	Hersey	31.9
Carlton	85.4	Belleville	39.9	New Baltimore	31.6
Sterling Heights	77.6	Clinton	39.7	Walker	31.3
Brighton	73.7	Bridgman	37.9	Marysville	30.9
DeWitt	73.0	Grand Beach	37.6	Luther	29.4
Troy	70.2	Hudsonville	37.5	Riverview	28.5
Reese	56.7	Rockford	36.9	Birch Run	28.3
Pinckney	50.9	Mattawan	36.6	Chatham	28.0
Utica	50.7	Lake Ann	36.6	Walled Lake	26.3
Kentwood	49.9	AuGres	36.2	Imlay City	26.0
Springfield	48.1	Saline	34.8	Kent City	25.4
Fife Lake	46.7	Galesburg	34.5	Clare	25.0
Buckley	46.3	Perry	34.0	Fountain	25.0
Cedar Spring	44.7	Coopersville	33.7	Rose City	24.7
Forestville	44.5	Howell	33.5	Baroda	24.4
		Slowest growing			
Richland	-33.2	Ecorse	-17.5	Garden City	-14.9
Allen	-30.9	Flint	-17.4	Lincoln Park	-14.9
Lake Anglus	-30.7	Otter Lake	-17.2	Berkley	-14.8
Daggett	-25.1	Birmingham	-17.1	Beverly Hills	-14.7
Rosebush	-23.5	Wyandotte	-17.0	Bancroft	-14.6
Clayton	-21.6	Empire	-16.9	Applegate	-14.6
Highland Park	-21.3	Allen Park	-16.8	Clawson	-14.3
Hamtramck	-20.5	East Detroit	-16.6	Oak Park	-14.2
Detroit	-20.5	Grayling	-16.4	Mount Morris	-14.1
Posen	-20.3	Munising	-16.2	Onaway	-14.1
Pleasent Ridge	-19.4	Bay City	-15.9	Clifford	-14.0
River Rouge	-19.0	Gaastra	-15.7	Traverse City	-14.0
Fruit Port	-18.9	Muskegon Heights	-15.6	Grosse Pte. Woods	-13.7
Harper Woods	-18.9	Saginaw	-15.6	Casnovia	-13.6
Alpha	-18.8	Dearborn Heights	-15.4	St. Clair Shores	13.5
Huntington Woods	-18.7	Melvindale	-15.3	Franklin	-13.5
Ypsilanti	-18.6	Plymouth	-15.1	Gladstone	-13.4
Royal Oak	-17.8	Ferndale	-15.0	Stanwood	-13.3

SOURCE: Bureau of the Census, special release.

TABLE I-4. POPULATION OF MICHIGAN COUNTIES: CENSUS 1920, 1930, 1940, 1950, 1960, 1970, and 1980

County	1920	1930	1940	1950	1960	1970	1980
Alcona	5,912	4,989	5,463	5,856	6,352	7,113	9,740
Alger	9,983	9,327	10,167	10,007	9,250	8,568	9,225
Allegan	37,540	38,974	41,839	47,493	57,729	66,575	81,555
Alpena	17,869	18,574	20,766	22,189	28,556	30,708	32,315
Antrim	11,543	9,979	10,964	10,721	10,373	12,612	16,194
Arenac	9,460	8,007	9,233	9,644	9,860	11,149	14,706
Baraga	7,662	9,168	9,356	8,037	7,151	7,789	8,484
Barry	21,383	20,928	22,613	26,183	31,738	38,166	47,781
Bay	69,548	69,474	74,981	88,461	107,042	117,339	119,881
Benzie	6,947	6,587	7,800	8,306	7,834	8,593	11,205
Berrien	62,653	80,066	89,117	115,702	149,865	163,875	171,276
Branch	23,997	23,950	25,845	30,202	34,903	37,906	40,188
Calhoun	72,918	87,043	94,206	120,813	138,858	141,963	141,557
Cass	20,395	20,888	21,910	28,185	36,932	43,312	49,499
Charlevoix	15,788	11,981	13,031	13,475	13,421	16,541	19,907
Cheboygan	13,991	11,502	13,644	13,731	14,550	16,573	20,649
Chippewa	24,818	25,047	27,807	29,206	32,655	32,412	29,029
Clare	8,250	7,032	9,163	10,253	11,647	16,695	23,822
Clinton	23,110	24,174	26,671	31,195	37,969	48,492	55,893
Crawford	4,049	3,097	3,765	4,151	4,971	6,482	9,465
Delta	30,909	32,280	34,037	32,913	34,298	35,924	38,947
Dickinson	19,941	29,941	28,731	24,844	23,917	23,753	25,341
Eaton	29,377	31,728	34,124	40,023	49,684	68,892	88,337
Emmet	15,639	15,109	15,791	16,534	15,904	18,331	22,992
Genesee	125,668	211,641	227,944	270,963	374,313	445,589	450,449

TABLE I-4. POPULATION OF MICHIGAN COUNTIES: CENSUS 1920, 1930, 1940, 1950, 1960, 1970, and 1980 (cont.).

County	1920	1930	1940	1950	1960	1970	1980
Gladwin	8,827	7,424	9,385	9,451	10,769	13,471	19,957
Gogebic	33,225	31,577	31,797	27,053	24,370	20,676	19,686
Grand Traverse	19,518	20,011	23,390	28,598	33,490	39,175	54,899
Gratiot	33,914	30,252	32,205	33,429	37,012	39,246	40,448
Hillsdale	28,161	27,417	29,092	31,916	34,742	37,171	42,071
Houghton	71,930	52,851	47,631	39,771	35,654	34,652	37,872
Huron	32,786	31,132	32,584	33,149	34,006	34,083	36,459
Ingham	81,554	116,587	130,616	172,941	211,296	261,039	272,437
Ionia	33,087	35,093	35,710	38,158	43,132	45,848	51,815
Iosco	8,199	7,517	8,560	10,906	16,505	24,905	28,349
Iron	22,107	20,805	20,243	17,692	17,184	13,813	13,635
Isabella	22,610	21,126	25,982	28,964	35,348	44,594	54,110
Jackson	72,539	92,304	93,108	197,925	131,994	143,274	151,495
Kalamazoo	71,225	91,368	100,085	126,707	169,712	201,550	212,378
Kalkaska	5,577	3,799	5,159	4,597	4,382	5,272	10,952
Kent	183,041	240,511	246,338	288,292	363,187	411,044	44,506
Keweenaw	6,322	5,076	4,004	2,918	2,417	2,264	1,963
Lake	4,437	4,066	4,798	5,257	5,338	5,661	7,711
Lapeer	25,782	28,348	32,116	35,794	41,926	52,361	70,038
Leelanau	9,061	8,206	8,436	8,647	9,321	10,872	14,007
Lenawee	47,767	49,849	53,110	64,629	77,789	81,951	89,948
Livingston	17,522	19,274	20,863	26,725	38,233	58,967	100,289
Luce	6,149	6,528	7,423	8,147	7,827	6,789	6,659
Mackinac	8,026	8,783	9,438	9,287	10,853	9,560	10,178
Macomb	38,103	77,146	107,638	184,961	405,804	625,309	694,600

TABLE I-4. POPULATION OF MICHIGAN COUNTIES: CENSUS 1920, 1930, 1940, 1950, 1960, 1970, and 1980 (cont.).

County	1920	1930	1940	1950	1960	1970	1980
Manistee	20,899	17,409	18,450	18,524	19,042	20,094	23,019
Marquette	45,786	44,076	47,144	47,654	56,154	64,686	74,101
Mason	19,831	18,756	19,378	20,474	21,929	22,612	26,365
Mecosta	17,765	15,738	16,902	18,968	21,051	27,992	36,961
Menominee	23,778	23,652	24,883	25,299	24,685	24,587	26,201
Midland	17,237	19,150	27,094	35,662	51,4[illegible]0	63,769	73,578
Missaukee	9,004	6,992	8,034	7,458	6,784	7,126	10,009
Monroe	37,115	52,485	58,620	75,666	101,120	118,479	134,659
Montcalm	30,441	27,471	28,581	31,013	35,795	38,660	47,555
Montmorency	4,089	2,814	3,840	4,125	4,424	5,247	7,492
Muskegon	62,362	84,630	94,501	121,545	149,943	157,426	157,589
Newaygo	17,378	17,029	19,286	21,567	24,160	27,992	34,917
Oakland	90,050	211,251	254,068	396,001	690,259	907,871	1,011,793
Oceana	15,601	13,805	14,812	16,105	16,547	17,984	22,002
Ogemaw	7,786	6,595	8,720	9,345	9,680	11,903	16,436
Ontonagon	12,428	11,114	11,359	10,282	10,584	10,548	9,861
Osceola	15,221	12,806	13,309	13,797	13,595	14,838	18,928
Oscoda	1,783	1,728	2,543	3,134	3,447	4,726	6,858
Otsego	6,043	5,554	5,827	6,435	7,545	10,422	
Ottawa	47,660	54,858	59,660	73,751	98,719	128,181	157,174
Presque Isle	12,131	11,330	12,250	11,996	13,117	12,836	14,267
Roscommon	2,032	2,055	3,668	5,916	7,200	9,892	16,374
Saginaw	100,286	120,717	130,468	153,515	190,752	219,743	228,059
St. Clair	58,009	67,563	76,222	91,599	107,201	120,175	138,802
St. Joseph	26,818	30,618	31,749	35,071	42,332	47,392	56,083

TABLE I-1. POPULATION OF MICHIGAN COUNTIES: CENSUS 1920, 1930, 1940, 1950, 1960, 1970, and 1980 (cont.).

County	1920	1930	1940	1950	1960	1970	1980
Sanilac	31,237	27,751	30,114	30,837	32,314	35,181	40,789
Schoolcraft	9,997	8,451	9,524	9,148	8,953	8,226	8,575
Shiawassee	35,924	39,517	41,207	45,967	53,446	63,075	71,140
Tuscola	33,320	32,934	35,694	38,258	43,305	48,603	56,961
Van Buren	30,715	32,637	35,111	39,184	48,395	56,173	66,814
Washtenaw	49,520	65,530	80,810	134,606	172,440	234,103	264,748
Wayne	1,177,645	1,888,946	2,015,623	2,435,235	2,666,297	2,669,604	2,337,240
Wexford	18,297	16,827	17,976	18,628	18,466	19,717	25,102
TOTAL	3,668,412	4,842,325	5,256,106	6,371,766	7,823,194	8,879,862	9,258,344

SOURCES: Bureau of the Census, U.S. Census of Population: 1940, Number of Inhabitants, Michigan (Washington, D.C.: 1941), Table 5, U.S. Census of Population: 1950, Number of Inhabitants, (Washington, D.C.: 1951), Table 5, U.S. Census of Population: 1960, Number of Inhabitants, Michigan (Washington, D.C.: 1961), Table 6, and U.S. Census of Population: 1970, Number of Inhabitants, Michigan (Washington, D.C.: 1971), Table 9, and Bureau of the Census, 1980 Census of Population and Housing, Michigan (Washington, D.C.: 1981), Table 1.
and Budget, Information System Division, special release.

TABLE I-5. COMPONENTS OF POPULATION CHANGE IN MICHIGAN, BY COUNTY: CENSUS 1960 TO CENSUS 1980

County	1960 to 1970				1970 to 1980			
	Population change[a]	Births[b]	Deaths	Net migration	Population change[a]	Births[b]	Deaths	Net migration
Alcona	761	1,026	782	517	2,627	1,026	1,146	2,747
Alger	-682	1,534	1,098	-1,118	657	1,322	1,033	3[illegible]
Allegan	8,846	12,689	5,740	1,897	14,980	12,286	6,038	8,732
Alpena	2,152	6,675	2,693	-1,830	1,607	4,885	2,700	-577
Antrim	2,239	2,054	1,505	1,690	3,582	2,268	1,647	2,961
Arenac	1,289	1,892	1,269	666	3,557	2,060	1,421	2,919
Baraga	638	1,494	990	134	695	1,323	1,004	376
Barry	6,428	6,661	3,272	3,039	7,615	6,409	3,589	4,794
Bay	10,297	24,815	9,767	-4,751	2,542	19,183	9,706	-6,935
Benzie	759	1,534	1,053	278	2,612	1,427	1,221	2,407
Berrien	14,010	35,887	15,181	-6,696	7,336	29,338	15,414	-6,588
Branch	3,003	6,350	3,705	358	2,282	6,021	3,784	45
Calhoun	3,105	29,382	13,098	-13,179	-406	22,600	12,946	-10,061
Cass	6,380	6,935	3,975	3,420	6,187	7,137	4,058	3,108
Charlevoix	3,120	3,073	1,809	1,856	3,366	2,907	1,859	2,318
Cheboygan	2,023	3,129	1,686	580	4,076	3,052	2,004	3,028
Chippewa	-243	9,331	3,037	-6,537	-3,383	6,379	2,957	-6,805
Clare	5,048	2,667	1,692	4,073	7,127	2,872	2,353	6,608
Clinton	10,523	9,719	3,356	4,160	7,401	8,185	3,229	2,445
Crawford	1,511	1,177	636	970	2,983	1,293	853	2,542
Delta	1,626	6,683	3,778	-1,279	3,023	5,993	4,055	1,085
Dickinson	-164	4,024	2,894	-1,294	1,588	3,305	3,066	1,349
Eaton	19,208	11,370	4,691	12,529	19,445	11,307	5,065	13,203
Emmet	2,427	3,419	2,001	1,009	4,661	3,183	2,028	3,506
Genesee	70,028	98,739	30,380	1,669	4,860	78,036	37,681	-40,495

TABLE I-5. COMPONENTS OF POPULATION CHANGE IN MICHIGAN, BY COUNTY: CENSUS 1960 TO CENSUS 1980

County	1960 to 1970				1970 to 1980			
	Population change[a]	Births[b]	Deaths	Net migration	Population change[a]	Births[b]	Deaths	Net migration
Gladwin	2,702	2,171	1,298	1,829	6,486	2,387	1,754	5,853
Gogebic	-3,694	3,262	3,274	-3,682	-990	2,513	3,041	-462
Grand Traverse	5,685	6,790	3,398	2,293	15,724	7,440	3,910	12,194
Gratiot	2,234	8,882	3,844	-2,804	1,202	6,740	3,579	-1,959
Hillsdale	2,429	7,022	3,715	-878	4,900	6,214	3,655	2,341
Houghton	-1,002	5,961	5,126	-1,837	3,220	5,033	4,755	2,942
Huron	77	7,491	3,876	-3,538	2,376	5,626	4,105	855
Ingham	49,743	53,584	16,852	13,011	14,481	44,506	16,522	-13,503
Ionia	2,716	9,273	4,403	-2,154	5,967	8,434	4,199	1,733
Iosco	8,400	6,253	1,876	4,023	3,444	5,487	2,566	522
Iron	-3,371	2,133	2,312	-3,192	-178	1,529	2,109	402
Isabella	9,246	7,970	2,894	4,170	9,516	7,162	3,013	5,367
Jackson	11,280	27,765	12,804	-3,681	8,221	22,559	12,712	-1,626
Kalamazoo	31,838	37,175	14,291	8,954	10,828	30,173	13,922	-5,423
Kalkaska	890	898	696	688	5,580	1,519	913	4,974
Kent	47,857	84,359	33,901	-2,601	33,462	70,882	34,662	-2,759
Keweenaw	-153	355	408	-100	-301	271	352	-219
Lake	323	870	963	416	2,050	970	1,102	2,182
Lapeer	10,391	9,783	3,946	4,554	17,677	10,432	4,447	11,691
Leelanau	1,551	1,683	1,088	956	3,135	1,627	1,225	2,733
Lenawee	3,820	15,657	7,583	-4,254	7,997	14,657	7,277	617
Livingston	20,734	9,192	3,797	15,339	41,322	11,569	5,001	34,754
Luce	-1,038	1,177	703	-1,512	-130	1,024	738	-416
Mackinac	-1,193	2,258	1,056	-2,395	518	1,455	1,148	211
Macomb	219,505	125,043	28,368	122,830	68,396	96,355	40,065	12,106

TABLE I-5. COMPONENTS OF POPULATION CHANGE IN MICHIGAN, BY COUNTY: CENSUS 1960 TO CENSUS 1980

County	1960 to 1970				1970 to 1980			
	Population change[a]	Births[b]	Deaths	Net migration	Population change[a]	Births[b]	Deaths	Net migration
Manistee	1,052	3,822	2,511	- 259	2,626	2,903	2,626	2,349
Marquette	8,532	13,912	5,717	337	9,415	12,781	5,380	2,014
Mason	683	3,872	2,647	-542	3,753	3,493	2,604	2,864
Mecosta	6,941	4,710	2,304	4,535	8,969	4,680	2,446	6,736
Menominee	-98	4,240	2,850	-1,488	1,614	3,538	2,820	897
Midland	12,319	13,274	3,337	2,382	9,809	11,222	4,001	2,588
Missaukee	342	1,281	821	-118	2,883	1,443	885	2,326
Monroe	17,359	24,050	8,578	1,887	15,444	20,130	8,970	4,285
Montcalm	3,865	7,931	4,234	168	7,895	7,574	4,420	4,741
Montmorency	823	734	596	685	2,245	947	841	2,139
Muskegon	7,483	34,063	12,878	-13,702	163	25,745	13,599	-11,983
Newaygo	3,832	5,323	2,774	1,283	6,925	5,024	3,142	5,043
Oakland	217,612	161,590	50,009	106,031	103,922	137,088	65,304	32,139
Oceana	1,437	3,362	1,938	13	4,018	3,473	2,077	2,622
Ogemaw	2,223	1,772	1,318	1,769	4,533	2,114	1,834	4,253
Ontonagon	-36	2,003	1,271	-768	-687	1,590	1,227	-1,051
Osceola	1,243	2,768	1,678	153	4,090	2,901	1,852	3,041
Oscoda	1,279	735	510	1,054	2,132	762	781	2,151
Otsego	2,877	1,967	832	1,742	4,571	2,205	1,067	3,434
Ottawa	29,462	24,141	8,216	13,537	28,993	23,300	9,110	14,804
Presque Isle	-281	2,637	1,334	-1,584	1,431	2,056	1,342	717
Roscommon	2,692	1,181	1,143	2,654	6,482	1,690	1,838	6,629
Saginaw	28,991	48,032	17,070	-1,971	8,316	39,289	17,738	-13,234
St. Clair	12,974	22,928	11,399	1,445	19,522	20,861	12,350	11,011
St. Joseph	5,060	8,987	4,927	1,000	8,691	8,866	4,948	4,774

TABLE I-5. COMPONENTS OF POPULATION CHANGE IN MICHIGAN, BY COUNTY: CENSUS 1960 TO CENSUS 1980

County	1960 to 1970				1970 to 1980			
	Population change[a]	Births[b]	Deaths	Net migration	Population change[a]	Births[b]	Deaths	Net migration
Sanilac	2,575	6,769	4,033	-161	5,608	6,070	4,085	3,624
Schoolcraft	-727	1,669	1,069	-1,327	349	1,301	1,109	157
Shiawassee	9,629	13,439	5,321	1,511	8,065	11,780	5,189	1,475
Tuscola	5,298	9,593	4,678	383	8,358	8,846	4,495	4,007
Van Buren	7,778	10,538	6,058	3,298	10,641	10,401	5,928	6,168
Washtenaw	61,663	42,116	11,850	31,397	30,645	37,715	13,067	5,996
Wayne	454	537,201	260,295	-276,452	-332,477	404,359	247,901	-488,935
Wexford	1,251	3,780	2,277	-252	5,385	3,687	2,362	4,061
TOTAL	1,051,889	1,753,686	729,033	27,236	380,252	1,440,182	759,956	-299,974

SOURCE: Bureau of the Census, Current Population Reports (Washington, D.C.: 1977), Series P-25, No. 461, and Michigan Department of Management and Budget, Information System Division, special release.

a. Not corrected for errors found after tabulations were completed.

b. Corrected for underregistration.

c. Less than 50 persons or less than 0.05 percent.

TABLE I-6. RESIDENT POPULATION OF MICHIGAN AND THE UNITED STATES, BY AGE GROUP: CENSUS 1940, 1950, 1960, 1970, AND 1980

(In thousands)

	Michigan				United States			
Age Group	1950	1960	1970	1980	1950	1960	1970	1980
Under 5	704	969	804	685	16,197	20,321	17,154	16,344
5 - 9	569	879	924	727	13,217	18,692	19,956	16,697
10 - 14	472	744	979	802	11,126	16,773	20,789	18,241
15 - 19	431	564	873	900	10,681	13,219	19,070	21,162
20 - 24	491	447	703	893	11,622	10,801	16,371	21,313
25 - 29	538	474	594	807	12,323	10,869	13,477	19,518
30 - 34	505	539	489	708	11,577	11,949	11,430	17,558
35 - 39	473	556	474	564	11,281	12,481	11,107	13,963
40 - 44	425	509	528	465	10,224	11,600	11,981	11,668
45 - 49	386	461	529	446	9,082	10,879	12,116	11,088
50 - 54	350	398	478	485	8,279	9,606	11,104	11,709
55 - 59	313	353	411	471	7,239	8,430	9,973	11,614
60 - 64	254	293	336	393	6,061	7,142	8,617	10,086
65 - over	462	638	753	912	12,271	16,560	20,066	25,544
Median age	29.8	28.3	26.3	28.9	30.2	29.5	28.1	30.0
Male	3,212	3,883	4,349	4,514	75,228	88,331	98,912	110,032
Female	3,160	3,940	4,526	4,744	75,951	90,992	104,300	116,473
Total population	6,372	7,823	8,875	9,258	151,179	179,323	203,212	226,505

SOURCE: Bureau of the Census, *1980 Census of Populations, Supplementary Reports* (Washington, D.C.: 1981), PC80-51-1; *U.S. Census of Population: 1970,* vol. 1, *Characteristics of the Population* Part 1, U.S. Summary (Washington, D.C.: 1974); *U.S.* Census of Populations: *1970, General Population Characteristics, Michigan* (Washington, D.C.: 1971), Final Report PC (1)-24B; and similar documents for previous years.

TABLE I-7. POPULATION OF MICHIGAN, BY RACE AND COUNTY, CENSUS: 1970 AND 1980

County	Year	White	Black	Indian	Asian	Other	Spanish origin[a]	Total
Alcona	1970	7,081	--	24	2	6	--	7,113
	1980	9,660	6	44	16	14	2	9,740
Alger	1970	8,443	38	84	2	1	--	8,568
	1980	8,952	49	194	14	16	36	9,225
Allegan	1970	64,811	1,088	232	25	419	--	66,575
	1980	78,354	1,471	408	190	1,132	2,011	81,555
Alpena	1970	30,589	64	27	7	21	--	30,708
	1980	32,134	19	83	33	46	79	32,315
Antrim	1970	12,502	3	101	1	5	--	12,612
	1980	16,019	15	119	20	21	65	16,194
Arenac	1970	11,067	10	36	7	29	--	11,149
	1980	14,529	7	87	20	63	160	14,706
Baraga	1970	7,337	452	411	2	6	--	7,789
	1980	7,656	58	754	9	7	37	8,484
Barry	1970	38,052	34	24	18	38	--	38,166
	1980	45,259	66	174	76	206	420	45,751
Bay	1970	116,195	736	166	77	165	--	117,339
	1980	116,172	1,023	604	289	1,793	3,162	119,881
Benzie	1970	8,391	78	82	3	39	--	8,593
	1980	10,970	36	143	13	43	105	11,205
Berrien	1970	144,803	18,283	302	172	315	--	163,875
	1980	144,007	24,817	593	822	1,037	2,088	171,276
Branch	1970	37,586	202	52	10	56	--	37,906
	1980	39,855	79	102	58	94	223	40,188
Calhoun	1970	129,399	11,955	205	129	275	--	141,963
	1980	125,616	13,577	452	541	1,371	2,433	141,557
Cass	1970	38,958	4,103	138	15	98	--	43,312
	1980	44,740	4,150	256	110	243	337	49,499
Charlevoix	1970	16,277	17	214	13	20	--	16,541
	1980	19,511	15	325	38	18	62	19,907
Cheboygan	1970	16,464	14	62	26	7	--	16,573
	1980	20,347	13	240	32	17	60	20,649

TABLE I-7. POPULATION OF MICHIGAN, BY RACE AND COUNTY, CENSUS: 1970 AND 1980 (cont.)

County	Year	White	Black	Indian	Asian	Other	Spanish origin[a]	Total
Chippewa	1970	30,613	785	860	50	104	--	32,412
	1980	26,121	369	2,395	52	92	91	29,029
Clare	1970	16,653	5	25	5	7	--	16,695
	1980	23,620	8	139	20	35	96	23,822
Clinton	1970	48,302	43	91	26	30	--	48,492
	1980	54,894	169	218	92	520	991	55,893
Crawford	1970	6,399	50	30	1	2	--	6,482
	1980	9,333	56	44	16	16	49	9,465
Delta	1970	35,724	123	151	24	2	--	35,924
	1980	38,290	12	439	53	153	103	38,947
Dickinson	1970	23,728	2	12	4	7	--	23,753
	1980	25,244	8	37	26	26	46	25,341
Eaton	1970	68,407	285	73	54	73	--	68,892
	1980	84,846	1,987	264	399	841	1,616	88,337
Emmet	1970	17,795	68	439	20	9	--	18,331
	1980	22,169	100	595	39	89	57	22,992
Genesee	1970	382,209	60,338	589	393	812	--	444,341
	1980	362,824	78,804	2,696	1,936	4,189	7,649	450,449
Gladwin	1970	13,398	10	23	14	26	--	13,471
	1980	19,812	11	96	19	19	117	19,957
Gogebic	1970	20,559	4	94	10	9	--	20,676
	1980	19,259	129	260	20	21	60	19,686
Grand Traverse	1970	38,737	128	220	40	50	--	39,175
	1980	54,062	163	394	142	138	297	54,899
Gratiot	1970	39,107	45	20	13	60	--	39,246
	1980	39,482	36	126	59	745	1,321	40,448
Hillsdale	1970	37,011	71	13	29	47	—	37,171
	1980	41,682	101	77	93	118	307	42,071
Houghton	1970	34,451	39	18	55	89	--	34,652
	1980	37,315	110	76	238	133	127	37,872
Huron	1970	34,001	25	4	10	43	--	34,083
	1980	36,096	25	78	56	204	396	36,459

TABLE I-7. POPULATION OF MICHIGAN, BY RACE AND COUNTY, CENSUS: 1970 AND 1980 (cont.)

County	Year	White	Black	Indian	Asian	Other	Spanish origin[a]	Total
Ingham	1970	244,368	14,371	608	921	771	--	261,039
	1980	239,869	21,084	1,515	2,720	7,249	10,523	272,437
Ionia	1970	44,604	1,098	42	22	82	--	45,848
	1980	49,402	1,642	188	104	--	--	51,815
Iosco	1970	23,936	738	88	59	84	--	24,905
	1980	27,219	654	158	140	--	--	28,349
Iron	1970	13,757	4	42	5	5	--	13,813
	1980	13,533	2	60	26	--	--	13,635
Isabella	1970	43,632	326	439	50	147	--	44,594
	1980	52,326	488	681	163	--	--	54,110
Jackson	1970	134,194	8,492	176	160	252	--	143,274
	1980	138,529	10,840	496	522	--	--	151,495
Kalamazoo	1970	190,925	9,579	254	324	468	--	201,550
	1980	192,265	15,846	658	1,417	2,192	2,605	212,378
Kalkaska	1970	5,259	--	12	1	--	--	5,272
	1980	10,875	3	34	25	15	54	10,952
Kent	1970	385,978	23,076	1,121	296	573	--	411,044
	1980	403,512	31,460	2,059	2,382	5,093	8,742	444,506
Keweenaw	1970	2,238	20	1	4	1	--	2,264
	1980	1,942	9	1	2	9	6	1,963
Lake	1970	4,365	1,274	15	1	6	--	5,661
	1980	6,333	1,285	50	7	36	50	7,711
Lapeer	1970	51,845	339	46	35	52	--	52,317
	1980	68,767	163	168	184	756	1,325	70,038
Leelanau	1970	10,688	23	131	6	24	--	10,872
	1980	13,757	18	178	21	33	72	14,007
Lenawee	1970	79,932	554	128	55	940	--	81,609
	1980	86,530	758	171	293	2,196	4,573	89,948
Livingston	1970	58,252	492	114	39	70	--	58,967
	1980	98,808	478	411	271	321	781	100,289
Luce	1970	6,719	5	62	1	2	--	6,789
	1980	6,392	1	254	9	3	16	6,659

TABLE I-7. POPULATION OF MICHIGAN, BY RACE AND COUNTY, CENSUS: 1970 AND 1980 (cont.)

County	Year	White	Black	Indian	Asian	Other	Spanish origin[a]	Total
Mackinac	1970	9,448	206	184	3	19	--	9,660
	1980	9,246	5	901	13	13	30	10,178
Macomb	1970	615,556	7,572	536	1,006	639	--	625,309
	1980	675,135	9,142	1,942	5,616	2,765	6,638	694,600
Manistee	1970	19,853	76	120	3	42	--	20,094
	1980	22,615	47	202	51	104	316	23,019
Marquette	1970	63,109	1,213	128	123	113	--	64,686
	1980	71,570	1,270	614	339	308	489	74,101
Mason	1970	22,383	110	96	9	14	--	22,612
	1980	25,727	178	169	93	198	370	26,365
Mecosta	1970	27,483	403	46	18	42	--	27,992
	1980	35,780	782	154	120	125	202	36,961
Menominee	1970	24,400	4	159	17	7	--	24,587
	1980	25,827	6	307	36	25	58	26,201
Midland	1970	63,219	147	54	200	141	--	63,769
	1980	71,844	566	190	587	391	810	73,578
Missaukee	1970	7,094	1	29	--	1	--	7,126
	1980	9,925	2	34	15	33	26	10,009
Monroe	1970	116,220	2,038	76	53	92	--	118,479
	1980	131,025	2,313	255	280	786	1,803	134,659
Montcalm	1970	39,386	57	55	21	141	--	39,660
	1980	--	--	--	--	--	--	--
Montmorency	1970	5,244	1	2	--	--	--	5,247
	1980	7,458	1	19	8	--	--	7,492
Muskegon	1970	139,899	16,722	472	77	256	--	157,426
	1980	135,531	19,175	1,120	395	--	--	157,589
Newaygo	1970	27,298	531	39	21	103	--	27,992
	1980	33,808	555	142	59	--	--	34,917
Oakland	1970	875,664	28,439	728	1,812	1,228	--	907,871
	1980	942,067	47,962	2,737	11,720	7,307	14,478	1,011,793
Oceana	1970	17,666	53	80	4	181	--	17,984
	1980	20,901	42	221	33	805	1,132	22,002

TABLE I-7. POPULATION OF MICHIGAN, BY RACE AND COUNTY, CENSUS: 1970 AND 1980 (cont.)

County	Year	White	Black	Indian	Asian	Other	Spanish origin[a]	Total
Ogemaw	1970	11,874	2	19	1	7	--	11,903
	1980	16,337	9	63	16	11	53	16,436
Ontonagon	1970	10,490	1	43	9	5	--	10,548
	1980	9,773	3	62	16	7	16	9,861
Osceola	1970	14,800	12	16	2	8	--	14,838
	1980	18,774	17	77	35	25	106	18,928
Oscoda	1970	4,708	1	14	1	2	--	4,726
	1980	6,817	1	30	2	8	10	6,858
Otsego	1970	10,369	16	16	11	87	--	10,422
	1980	14,889	6	29	56	13	49	14,993
Ottawa	1970	127,320	10	190	74	53	--	128,181
	1980	152,789	632	420	689	2,644	5,006	157,174
Presque Isle	1970	12,823	--	4	3	2	--	12,836
	1980	14,177	6	40	30	14	38	14,267
Roscommon	1970	9,843	11	20	10	83	--	9,892
	1980	16,290	--	51	15	18	64	16,374
Saginaw	1970	191,651	26,856	256	200	780	--	219,743
	1980	182,472	35,841	916	811	8,019	12,356	228,059
St. Clair	1970	116,976	2,703	214	92	190	--	120,175
	1980	134,109	2,804	558	302	1,029	2,066	138,802
St. Joseph	1970	46,268	1,023	44	13	44	--	47,392
	1980	54,256	1,360	143	167	157	386	56,083
Sanilac	1970	34,786	14	26	10	53	--	34,889
	1980	40,119	16	95	50	509	861	40,789
Schoolcraft	1970	8,185	3	36	--	2	--	8,226
	1980	8,203	3	351	13	5	20	8,575
Shiawassee	1970	62,855	30	78	29	83	--	63,075
	1980	70,273	67	317	148	335	818	71,140
Tuscola	1970	48,122	346	44	14	77	--	48,603
	1980	55,838	323	184	116	500	1,006	56,961
Van Buren	1970	51,210	4,456	205	21	281	--	56,173
	1980	60,206	5,041	468	119	980	1,499	66,814

TABLE I-7. POPULATION OF MICHIGAN, BY RACE AND COUNTY, CENSUS: 1970 AND 1980 (cont.)

County	Year	White	Black	Indian	Asian	Other	Spanish origin[a]	Total
Washtenaw	1970	213,350	17,822	283	1,687	961	--	234,103
	1980	227,091	28,323	720	5,631	2,983	4,055	264,748
Wayne	1970	1,928,500	721,072	4,419	6,490	6,270	--	2,666,751
	1980	1,457,409	829,868	6,667	15,164	28,132	46,301	2,337,240
Wexford	1970	19,681	2	22	1	7	--	19,717
	1980	24,905	12	85	48	52	134	25,102
Michigan	1970	7,833,474	991,066	16,854	15,285	18,404	--	8,875,083
	1980	7,868,956	1,198,710	40,038	56,731	93,909	162,388	9,258,344

SOURCE: U.S. Bureau of the Census, 1980 Census of Population and Housing, Advance Reports, Michigan (Washington, D.C.: 1981), PHC80-V-24; and a similar document for 1970.

a. 1970 data are not available. Spanish included in "Other" in 1970 data.

TABLE I-8. MICHIGAN'S ELDERLY POPULATION, BY COUNTY: CENSUS 1970 AND 1 JULY 1977

County	Census 1970		1 July 1977		Percentage of total population 65 years and older	
	60 years and older	65 years and older	60 years and older	65 years and older	Census 1970	1 July 1977
Alcona	1,706	1,213	2,400	1,700	17.1	19.4
Alger	1,371	951	1,600	1,100	11.1	11.3
Allegan	8,751	6,250	10,100	7,300	9.4	9.9
Alpena	3,794	2,600	5,100	3,500	8.5	10.5
Antrim	2,522	1,749	3,300	2,300	13.9	14.7
Arenac	1,930	1,387	2,400	1,800	12.5	12.9
Baraga	1,460	1,000	1,800	1,200	12.9	14.7
Barry	5,387	3,834	5,800	4,200	10.1	10.0
Bay	14,040	9,496	16,200	11,200	8.1	9.3
Benzie	1,774	1,221	2,200	1,500	14.3	14.7
Berrien	21,490	15,069	24,800	17,700	9.2	10.5
Branch	5,517	3,873	6,100	4,400	10.3	11.6
Calhoun	19,126	13,254	20,600	14,600	9.4	10.4
Cass	6,108	4,239	6,800	4,800	9.8	10.7
Charlevoix	2,600	1,868	3,100	2,300	11.4	11.6
Cheboygan	2,779	1,954	3,500	2,500	11.8	12.4
Chippewa	4,009	2,673	5,000	3,400	8.3	9.3
Clare	3,234	2,196	4,500	3,100	13.2	13.6
Clinton	4,883	3,349	5,500	3,800	6.9	7.0
Crawford	1,032	707	1,500	1,100	10.9	11.8
Delta	5,853	4,128	6,300	4,600	11.6	11.4
Dickinson	5,014	3,746	5,300	4,000	15.8	15.9
Eaton	7,144	4,887	8,000	5,600	7.1	7.0
Emmet	3,090	2,213	3,900	2,900	12.1	13.5
Genesee	43,072	28,959	49,900	34,200	6.5	7.7

TABLE I-8. MICHIGAN'S ELDERLY POPULATION, BY COUNTY: CENSUS 1970 AND 1 JULY 1977 (cont.)

County	Census 1970		1 July 1977		Percentage of total population 65 years and older	
	60 years and older	65 years and older	60 years and older	65 years and older	Census 1970	1 July 1977
Gladwin	2,495	1,730	3,400	2,400	12.9	14.0
Gogebic	4,650	3,354	5,100	3,700	16.3	18.5
Grand Traverse	6,036	4,238	7,700	5,500	10.9	11.8
Gratiot	5,369	3,955	5,400	4,100	10.1	13.7
Hillsdale	5,850	4,184	6,500	4,700	11.3	11.7
Houghton	6,761	4,728	7,800	5,600	13.7	15.0
Huron	5,994	4,334	7,000	5,200	12.8	14.1
Ingham	25,538	17,638	28,700	20,200	6.8	7.4
Ionia	6,073	4,412	6,300	4,700	9.7	9.5
Iosco	3,491	2,414	4,800	3,400	9.7	11.0
Iron	3,600	2,600	3,800	2,700	16.6	18.5
Isabella	4,117	2,842	4,700	3,300	6.4	6.4
Jackson	18,542	13,049	20,000	14,300	9.2	9.6
Kalamazoo	22,519	15,526	25,600	18,000	7.7	8.7
Kalkaska	1,114	785	1,400	1,000	14.6	8.8
Kent	53,704	38,078	60,000	43,300	9.3	10.1
Keweenaw	533	333	700	500	14.8	17.7
Lake	1,578	1,167	2,100	1,500	20.6	21.8
Lapeer	5,660	4,036	6,100	4,400	7.7	6.9
Leelanau	1,920	1,320	2,300	1,600	12.2	12.5
Lenawee	10,505	7,491	12,200	8,900	9.2	10.4
Livingston	6,599	4,500	8,300	5,800	7.7	6.7
Luce	1,342	922	1,400	1,000	13.6	13.5
Mackinac	1,696	1,170	2,000	1,400	12.2	13.2
Macomb	46,345	29,715	68,600	44,800	4.8	6.5

TABLE I-8. MICHIGAN'S ELDERLY POPULATION, BY COUNTY: CENSUS 1970 AND 1 JULY 1977 (cont.)

County	Census 1970		1 July 1977		Percentage of total population 65 years and older	
	60 years and older	65 years and older	60 years and older	65 years and older	Census 1970	1 July 1977
Sanilac	5,782	4,209	6,400	4,800	12.0	12.3
Schoolcraft	1,579	1,126	1,700	1,300	13.7	14.2
Shiawassee	7,233	5,077	7,500	5,400	8.1	7.7
Tuscola	6,053	4,334	6,500	4,700	9.0	8.7
Van Buren	8,901	6,475	10,000	7,400	11.6	11.9
Washtenaw	19,656	13,535	21,800	15,300	5.8	6.1
Wayne	359,080	249,070	342,000	241,700	9.4	10.0
Wexford	3,344	2,369	4,000	2,900	12.1	13.0
Michigan	1,086,346	749,633	1,212,500	850,400	8.5	13.3

SOURCE: Bureau of the Census, U.S. Census of Population: 1970, General Population Characteristics, Michigan (Washington, D.C.: 1971), Final Report PC1-B24, Table 16; and National Clearing House on Aging, The Elderly Population: Estimates by County 1977 (Washington, D.C.: 1980), Table I.

TABLE I-9. NUMBER OF PERSONS PER HOUSEHOLD IN MICHIGAN, BY COUNTY: CENSUS 1970 AND 1980

County	Persons per household		County	Persons per household	
	1970	1980		1970	1980
Alcona	2.95	2.60	Lake	2.85	2.53
Alger	3.23	2.76	Lapeer	3.54	3.23
Allegan	3.40	2.95	Leelanau	3.24	2.77
Alpena	3.47	2.86	Lenawee	3.26	2.91
Antrim	3.18	2.80	Livingston	3.42	3.15
Arenac	3.23	2.86	Luce	3.17	2.78
Baraga	3.19	2.81	Mackinac	3.25	2.74
Barry	3.27	2.92	Macomb	3.63	3.00
Bay	3.37	2.87	Manistee	3.09	2.68
Benzie	3.04	2.77	Marquette	3.23	2.80
Barrien	3.19	2.80	Mason	3.07	2.67
Branch	3.13	2.80	Mecosta	3.06	2.83
Calhoun	3.10	2.60	Menominee	3.18	2.79
Cass	3.22	2.86	Midland	3.51	2.94
Charlevoix	3.27	2.80	Missaukee	3.21	2.91
Cheboygan	3.32	2.82	Monroe	3.54	3.09
Chippewa	3.30	2.73	Montcalm	3.18	2.85
Clare	3.10	2.72	Montmorency	2.94	2.66
Clinton	3.55	3.14	Muskegon	3.32	2.84
Crawford	3.21	2.79	Newaygo	3.28	2.86
Delta	3.28	2.84	Oakland	3.40	2.82
Dickinson	2.97	2.62	Oceana	3.29	2.93
Eaton	3.43	2.89	Ogemaw	3.08	2.72
Emmet	3.25	2.76	Ontonagon	3.25	2.75
Genesee	3.39	2.89	Osceola	3.20	2.86
Gladwin	3.18	2.77	Oscoda	2.92	2.68
Gogebic	2.86	2.52	Otsego	3.37	2.97
Grand Traverse	3.22	2.76	Ottawa	3.49	3.04
Gratiot	3.32	2.90	Presque Isle	3.28	2.82
Hillsdale	3.17	2.84	Roscommon	2.74	2.49
Houghton	2.88	2.64	Saginaw	3.45	2.96
Huron	3.27	2.81	St. Clair	3.27	2.92
Ingham	3.10	2.67	St. Joseph	3.09	2.81
Ionia	3.37	2.98	Sanilac	3.29	2.89
Iosco	3.22	2.69	Schoolcraft	3.18	2.78
Iron	2.75	2.45	Shiawassee	3.38	3.03
Isabella	3.35	2.93	Tuscola	3.41	3.05
Jackson	3.23	2.81	Van Buren	3.23	2.86
Kalamazoo	3.15	2.67	Washtenaw	3.05	2.62
Kalkaska	3.01	2.87	Wayne	3.17	2.80
Kent	3.25	2.78	Wexford	3.13	2.76
Keweenaw	2.72	2.34			
			MICHIGAN	3.27	2.84

SOURCES: Bureau of the Census, U.S. Census of Population: 1970, General Population Characteristics, Michigan (Washington, D.C.: 1970), Final Report PC(1)-B24, Table 36; and special release.

TABLE I-10. PERCENTAGE OF POPULATION IN GROUP QUARTERS IN MICHIGAN, BY COUNTY: CENSUS 1970 AND 1980

County	Percentage	
	1970	1980
Alcona	0.7	0.9
Alger	2.2	2.0
Allegan	0.5	1.4
Alpena	0.9	1.3
Antrim	1.1	1.0
Arenac	1.2	0.7
Baraga	2.9	3.1
Barry	1.6	1.4
Bay	0.7	0.9
Benzie	1.0	0.9
Berrien	1.2	1.6
Branch	7.5	2.5
Calhoun	3.1	3.0
Cass	0.6	0.5
Charlevoix	1.0	0.8
Cheboygan	1.1	0.6
Chippewa	5.4	6.5
Clare	0.8	0.9
Clinton	0.5	0.3
Crawford	2.3	2.4
Delta	1.2	1.0
Dickinson	1.8	1.5
Eaton	1.1	1.3
Emmet	2.5	2.8
Genesee	0.9	0.8
Gladwin	0.6	0.5
Gogebic	1.2	2.9
Grand Traverse	6.2	3.6
Gratiot	4.2	4.4
Hillsdale	2.6	2.8
Houghton	8.2	9.4
Huron	0.9	1.5
Ingham	8.6	6.5
Ionia	5.8	6.6
Iosco	5.3	3.6
Iron	1.9	2.4
Isabella	15.8	13.0
Jackson	4.7	5.3
Kalamazoo	7.0	5.1
Kalkaska	0.2	0.4
Kent	2.1	2.7
Keweenaw	5.4	0.8
Lake	0.1	0.1
Lapeer	6.5	2.2
Leelanau	0.8	0.7
Lenawee	3.2	2.8
Livingston	2.1	1.5
Luce	18.4	8.1
Mackinac	1.1	0.8
Macomb	0.5	0.6
Manistee	0.6	1.0
Marquette	9.3	7.2
Mason	1.1	1.9
Mecosta	14.8	14.7
Menominee	1.2	1.1
Midland	1.0	2.2
Missaukee	0.2	0.3
Monroe	0.7	1.0
Montcalm	0.5	0.8
Montmorency	0.1	---
Muskegon	0.9	1.8
Newaygo	1.0	0.7
Oakland	1.1	1.0
Oceana	0.6	1.2
Ogemaw	0.6	1.5
Ontonagon	0.6	1.6
Osceola	0.7	1.0
Oscoda	1.5	1.6
Otsego	2.1	2.5
Ottawa	2.3	2.4
Presque Isle	2.0	0.9
Roscommon	0.8	0.9
Saginaw	1.0	1.4
St. Clair	0.8	0.6
St. Joseph	0.8	0.9
Sanilac	0.5	1.2
Schoolcraft	1.0	1.2
Shiawassee	0.3	0.6
Tuscola	3.8	2.0
Van Buren	0.6	1.0
Washtenaw	10.6	8.0
Wayne	1.4	1.3
Wexford	1.1	1.1
MICHIGAN	2.3	2.1

SOURCES: Bureau of the Census, U.S. Census of Population: 1970, General Population Characteristics, Michigan (Washington, D.C.: 1971), Final Report PC(1)-B24, Table 16; and special release.

II. HOUSING

The latest U.S. Census of Housing was conducted on 1 April 1970 in conjunction with the U.S. Census of Population.

Group quarters, which house five or more persons not related to the person in charge, are not included in the housing statistics. A housing unit is defined as "a house, an apartment, a group of rooms, or a single room occupied or intended for occupancy as separate living quarters." The latter are those in which the occupants do not live and eat with any other persons in the structure and which have either (1) direct access from the outside of the building or through a common hall or (2) complete kitchen facilities for the exclusive use of the occupants.

"Mobile homes or trailers, tents, boats, or railroad cars are not enumerated if vacant, used only for business, or used for vacations."

"Occupied rooms or suites of rooms in hotels, motels, and similar places are classified as housing units only when occupied by permanent residents, i.e., persons who consider the hotel as their usual place of residence or have no usual place of residence elsewhere."

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TABLE II-1. NUMBER OF OCCUPIED HOUSING UNITS IN MICHIGAN, BY ROOM SIZE OF UNIT: URBAN AND RURAL, BY RACE AND TENURE OF INHABITANTS: CENSUS 1940, 1950, 1960, 1970, AND 1980

Item	1940	1950	1960	1970	1980
Owner occupied					2,321,884[a]
Urban	438,376	800,618	1,190,245	1,414,423	n.a.
White	428,543	765,583	1,112,748	1,266,192	n.a.
Negro	9,833[b]	34,566	77,497[b]	143,014	n.a.
Rural	335,379	408,357	475,358	560,125	n.a.
White	332,836	405,098	470,644	553,531	n.a.
Negro	2,543[b]	2,733	4,694[b]	5,096	n.a.
Renter occupied					873,131[a]
Urban	486,537	474,519	478,844	574,067	n.a.
White	449,522	417,514	376,247	440,726	n.a.
Negro	37,015[b]	56,047	102,597[b]	127,432	n.a.
Rural	135,722	107,208	94,632	104,444	n.a.
White	134,110	105,726	92,248	101,736	n.a.
Negro	1,612[b]	1,054	2,384[b]	1,883	n.a.
Rooms					
1 room	30,416	29,721	32,755	30,619	n.a.
2 rooms	63,495	76,366	55,520	56,425	n.a.
3 rooms	122,169	170,896	155,995	189,383	n.a.
4 rooms	172,144	305,174	352,078	425,856	n.a.
5 rooms	338,648	454,648	674,297	785,664	n.a.
6 rooms	295,188	364,385	509,185	613,550	n.a.
7 rooms	163,158	184,049	253,466	298,317	n.a.
8 rooms or more	197,891	178,591	205,783	253,245	n.a.
TOTAL	1,396,014[d]	1,790,702[d]	2,239,079	2,653,059	3,195,015

SOURCES: Bureau of the Census, *Sixteenth Census of the United States: 1940, Housing*, vol. 2, *General Characteristics, Part 3: Iowa-Montana* (Washington, D.C.: 1943), Tables 2 and 8; Bureau of the Census, *U.S. Census of Housing: 1950*, vol. 1, *General Characteristics*, chapter 22, *Michigan* (Washington, D.C.: 1952), Tables 2 and 9; Bureau of the Census, *U.S. Census of Housing: 1960*, vol. 1, *States and Small Areas, Michigan* (Washington, D.C.: 1962), Final Report HC(1)-24, Tables 2 and 3; Bureau of the Census, *U.S. Census of Housing: 1970, General Housing Characteristics, Michigan* (Washington, D.C.: 1971), Final Report HC(1)-A24, Tables 2 and 3; and Bureau of the Census, *1980 Census of Housing, Selected Housing Characteristics by States and Counties* (Washington, D.C.: 1981), HC80-51-1.

a. Only totals available.

b. Includes other minority races.

c. Includes 12,905 units for which number of rooms was not reported.

d. Includes 26,872 units for which number of rooms was not reported.

n.a.: not available.

TABLE II-2. TENURE AND VACANCY STATUS OF HOUSING UNITS IN MICHIGAN, BY COUNTY, CENSUS: 1970 AND 1980

County	Seasonal and migratory	Year-Round Housing Units			
		Vacant	Owner occupied	Renter occupied	Total
Alcona					
1970	2,677	1,196	2,143	251	3,590
1980	2,782	2,879	3,252	463	6,594
Alger					
1970	467	844	2,049	546	3,439
1980	1,128	660	2,614	665	3,939
Allegan					
1970	2,377	1,808	16,073	3,421	21,302
1980	2,904	1,728	22,271	4,961	28,960
Alpena					
1970	571	1,126	7,267	1,504	9,897
1980	1,506	1,320	9,056	2,095	12,471
Antrim					
1970	1,343	2,109	3,391	537	6,037
1980	2,399	2,659	4,799	924	8,382
Arenac					
1970	1,427	506	2,938	469	3,913
1980	205	2,391	4,398	701	7,490
Baraga					
1970	212	528	1,885	487	2,900
1980	885	456	2,296	633	3,385
Barry					
1970	1,627	1,626	9,736	1,744	13,106
1980	1,483	2,233	13,037	2,396	17,666
Bay					
1970	517	1,490	28,117	6,454	36,061
1980	225	1,822	32,771	8,577	43,170
Benzie					
1970	2,152	921	2,336	460	3,717
1980	2,626	875	3,299	709	4,883

TABLE I-8. MICHIGAN'S ELDERLY POPULATION, BY COUNTY: CENSUS 1970 AND 1 JULY 1977 (cont.)

County	Census 1970		1 July 1977		Percentage of total population 65 years and older	
	60 years and older	65 years and older	60 years and older	65 years and older	Census 1970	1 July 1977
Manistee	3,858	2,742	4,500	3,300	13.5	14.9
Marquette	7,486	5,164	8,300	5,800	8.0	8.0
Mason	4,071	2,957	4,700	3,400	13.1	13.7
Mecosta	3,386	2,415	4,000	2,900	8.7	8.6
Menominee	4,500	3,202	4,900	3,600	13.1	13.7
Midland	5,208	3,445	7,000	4,700	5.4	6.8
Missaukee	1,340	916	1,600	1,100	12.9	12.1
Monroe	12,970	8,720	15,300	10,500	7.4	8.1
Montcalm	6,164	4,417	7,100	5,200	11.2	11.2
Montmorency	1,237	825	2,000	1,300	15.8	18.2
Muskegon	19,366	13,303	22,300	15,600	8.5	14.1
Newaygo	4,538	3,231	5,500	4,000	11.6	12.4
Oakland	91,287	59,992	122,500	82,000	6.6	8.3
Oceana	2,966	2,120	3,400	2,500	11.8	11.7
Ogemaw	2,545	1,785	3,400	2,400	15.0	16.2
Ontonagon	1,648	1,028	2,200	1,400	9.8	12.3
Osceola	2,478	1,795	2,900	2,200	12.0	11.8
Oscoda	1,166	803	1,600	1,100	17.0	17.0
Otsego	1,464	984	2,100	1,400	9.5	10.0
Ottawa	13,919	9,657	17,200	12,200	7.6	8.3
Presque Isle	2,185	1,482	2,800	2,000	11.6	14.0
Roscommon	2,587	1,699	4,400	3,000	17.2	18.8
Saginaw	24,611	16,780	27,500	19,100	7.7	8.4
St. Clair	16,959	11,789	19,100	13,500	9.9	10.3
St. Joseph	7,395	5,169	8,600	6,100	11.0	12.1

TABLE II-2. TENURE AND VACANCY STATUS OF HOUSING UNITS IN MICHIGAN, BY COUNTY, CENSUS: 1970 AND 1980 (cont.)

County	Seasonal and migratory	Year-Round Housing Units			
		Vacant	Owner occupied	Renter occupied	Total
Berrien					
1970	4,553	4,336	37,301	13,457	55,094
1980	3,342	5,140	42,463	17,813	65,416
Branch					
1970	1,204	1,453	8,794	2,414	12,661
1980	2,078	1,905	10,857	3,157	15,919
Calhoun					
1970	357	2,060	34,241	10,181	46,482
1980	289	2,822	37,395	13,728	53,945
Cass					
1970	1,674	2,245	10,912	2,445	15,602
1980	2,999	1,348	13,841	3,395	18,584
Charlevoix					
1970	1,346	1,269	4,118	884	6,271
1980	2,301	1,760	5,574	1,482	8,816
Cheboygan					
1970	2,898	1,082	4,090	854	6026
1980	2,821	2,390	5,994	1,283	9,667
Chippewa					
1970	2,103	1,672	5,832	3,464	10,968
1980	3,900	2,580	7,537	2,394	12,511
Clare					
1970	1,741	5,716	4,656	689	11,061
1980	7,145	2,713	7,166	1,520	11,399
Clinton					
1970	20	475	11,579	2,026	14,080
1980	40	673	14,987	2,768	18,428
Crawford					
1970	1,682	352	1,604	372	2,328
1980	1,792	2,382	2,765	550	5,697

TABLE II-2. TENURE AND VACANCY STATUS OF HOUSING UNITS IN MICHIGAN, BY COUNTY, CENSUS: 1970 AND 1980 (cont.)

County	Seasonal and migratory	Year-Round Housing Units			
		Vacant	Owner occupied	Renter occupied	Total
Delta					
1970	867	1,502	8,445	2,371	12,318
1980	1,977	1,360	10,555	3,013	14,928
Dickinson					
1970	778	784	6,587	1,268	8,639
1980	1,005	709	7,761	1,775	10,245
Eaton					
1970	157	805	15,982	3,896	20,683
1980	100	1,285	22,168	7,969	31,422
Emmet					
1970	2,026	1,379	4,330	1,169	6,878
1980	2,198	2,201	6,077	2,030	10,308
Genesee					
1970	541	5,382	100,473	29,274	135,129
1980	408	7,940	115,594	39,047	162,581
Gladwin					
1970	1,722	2,922	3,743	468	7,133
1980	1,548	4,802	6,089	1,070	11,961
Gogebic					
1970	1,124	653	5,681	1,448	7,782
1980	1,162	1,372	6,174	1,404	8,950
Grand Traverse					
1970	2,433	1,585	8,937	2,492	13,014
1980	1,804	2,642	14,437	4,730	21,809
Gratiot					
1970	152	814	8,867	2,465	12,146
1980	64	895	10,375	2,944	14,214
Hillsdale					
1970	683	1,394	9,112	2,296	12,805
1980	797	1,915	11,467	2,916	16,298

TABLE II-2. TENURE AND VACANCY STATUS OF HOUSING UNITS IN MICHIGAN, BY COUNTY, CENSUS: 1970 AND 1980 (cont.)

County	Seasonal and migratory	Year-Round Housing Units			
		Vacant	Owner occupied	Renter occupied	Total
Houghton					
1970	1,456	1,563	8,181	2,881	12,625
1980	1,969	1,526	9,198	3,777	14,501
Huron					
1970	2,668	1,654	8,550	1,775	11,979
1980	2,829	2,259	10,540	2,224	15,023
Ingham					
1970	109	3,985	49,613	27,425	81,023
1980	91	4,247	55,719	39,460	99,426
Ionia					
1970	350	1,048	10,349	2,460	13,857
1980	466	916	12,763	3,467	17,146
Iosco					
1970	3,196	3,414	4,756	2,571	10,741
1980	1,849	5,995	7,130	3032	16,157
Iron					
1970	781	1,163	4,082	848	6,093
1980	1,541	768	4,473	957	6,198
Isabella					
1970	298	959	7,778	3,412	12,149
1980	823	1,300	10,752	5,292	17,344
Jackson					
1970	944	1,804	33,347	8,914	44,065
1980	2,070	2,696	38,396	12,578	53,670
Kalamazoo					
1970	467	2,656	42,481	16,925	62,062
1980	501	3,907	49,511	25,894	79,312
Kalkaska					
1970	458	831	1,507	238	2,576
1980	1,957	844	3,213	582	4,639

TABLE II-2. TENURE AND VACANCY STATUS OF HOUSING UNITS IN MICHIGAN, BY COUNTY, CENSUS: 1970 AND 1980 (cont.)

County	Seasonal and migratory	Year-Round Housing Units			
		Vacant	Owner occupied	Renter occupied	Total
Kent					
1970	1,378	6,602	93,631	30,195	130,428
1980	1,831	43,892	111,706	43,892	163,451
Keweenaw					
1970	774	170	662	147	979
1980	975	341	702	131	1,174
Lake					
1970	2,414	2,170	1,695	263	4,128
1980	2,815	4,653	2,582	468	7,703
Lapeer					
1970	531	1,332	11,150	2,685	15,167
1980	695	1,129	17,441	3,761	22,331
Leelanau					
1970	1,271	1,730	2,757	569	5056
1980	1,850	2,200	4,019	1,004	7,223
Lenawee					
1970	1,841	1,541	18,891	5,348	25,780
1980	214	3,492	23,374	6,670	33,536
Livingston					
1970	2,024	1,681	13,736	3,150	18,567
1980	1,802	1,805	26,180	5,164	33,149
Luce					
1970	493	264	1,426	320	2,010
1980	1,139	243	1,822	370	2,435
Mackinac					
1970	1,831	1,237	2,345	598	4,180
1980	3,250	694	2,941	739	4,374
Macomb					
1970	145	4,755	142,650	28,928	176,333
1980	147	6,635	182,464	47,356	236,455

TABLE II-2. TENURE AND VACANCY STATUS OF HOUSING UNITS IN MICHIGAN, BY COUNTY, CENSUS: 1970 AND 1980 (cont.)

County	Seasonal and migratory	Year-Round Housing Units			
		Vacant	Owner occupied	Renter occupied	Total
Manistee					
1970	1,516	1,359	5,347	1,124	7,830
1980	2,404	1,341	6,752	1,738	9,831
Marquette					
1970	1,930	1,784	11,897	6,287	19,968
1980	3,658	2,358	15,738	8,776	26,872
Mason					
1970	1,131	2,085	5,902	1,373	9,360
1980	1,279	2,256	7,601	2,092	11,949
Mecosta					
1970	2,140	1,161	5,519	2,272	8,952
1980	901	3,481	7,928	3,206	14,615
Menominee					
1970	349	1,263	6,310	1,336	8,909
1980	1,246	1,016	7,472	1,811	10,299
Midland					
1970	225	1,515	14,730	3,283	19,528
1980	257	1,600	19,303	5,195	26,098
Missaukee					
1970	943	593	1,934	282	2,809
1980	2,060	629	2,974	453	4,056
Monroe					
1970	60	982	26,342	6,860	34,184
1980	243	2,008	33,963	9,147	45,118
Montcalm					
1970	2,474	1,559	10,206	2,189	13,954
1980	2,342	2,001	13,360	3,183	18,544
Montmorency					
1970	1,350	1,698	1,548	234	3,480
1980	2,927	2,145	2,453	361	4,959

TABLE II-2. TENURE AND VACANCY STATUS OF HOUSING UNITS IN MICHIGAN, BY COUNTY, CENSUS: 1970 AND 1980 (cont.)

County	Seasonal and migratory	Year-Round Housing Units			
		Vacant	Owner occupied	Renter occupied	Total
Muskegon					
1970	667	2,197	37,035	9,996	49,228
1980	570	3,145	41,207	13,319	57,671
Newaygo					
1970	2,194	2,342	7,170	1,276	10,788
1980	4,691	1,481	10,198	1,936	13,615
Oakland					
1970	1,975	9,110	207,038	57,528	273,676
1980	1945	16,118	264,138	91,049	371,305
Oceana					
1970	1,840	978	4,508	931	6,417
1980	3,095	881	6,166	1,252	8,299
Ogemaw					
1970	1,509	3,907	3,204	642	7,753
1980	161	6,876	4,991	949	12,816
Ontonagon					
1970	429	675	2,670	560	3,905
1980	986	532	2,930	594	4,056
Osceola					
1970	1,158	1,006	3,840	762	5,608
1980	1,622	1,747	5,440	1,118	8,305
Oscoda					
1970	1,895	1,523	1,394	202	3,119
1980	2,648	2,143	2,188	329	4,660
Otsego					
1970	779	1,346	2,555	470	4,371
1980	2,830	1,327	4,033	888	6,248
Ottawa					
1970	1,123	1,354	29,782	6,152	37,288
1980	1,182	2,329	41,520	8,929	52,778

TABLE II-2. TENURE AND VACANCY STATUS OF HOUSING UNITS IN MICHIGAN, BY COUNTY, CENSUS: 1970 AND 1980 (cont.)

County	Seasonal and migratory	Year-Round Housing Units			
		Vacant	Owner occupied	Renter occupied	Total
Presque Isle					
1970	1,257	616	3,336	497	4,449
1980	2,550	803	4,356	652	5,811
Roscommon					
1970	5,665	3,958	3,081	506	7,545
1980	4,970	6,436	5,577	942	12,955
Saginaw					
1970	179	2,495	49,107	14,036	65,638
1980	106	3,321	56,446	19,670	79,437
St. Clair					
1970	879	4,258	28,875	7,541	40,674
1980	1,659	2,936	37,009	10,299	50,244
St. Joseph					
1970	1,401	1,214	12,046	3,155	16,415
1980	1,230	1,455	15,419	4,375	21,249
Sanilac					
1970	2,366	1,924	8,776	1,775	12,475
1980	2,842	1,691	11,597	2,362	15,650
Schoolcraft					
1970	633	666	2,067	498	3,231
1980	1,320	609	2,458	587	3,654
Shiawassee					
1970	38	782	15,042	3,539	19,363
1980	62	1,043	18,807	4,552	24,402
Tuscola					
1970	323	1,491	11,446	2,263	15,200
1980	624	1,138	15,275	3,015	19,428
Van Buren					
1970	4,039	2,602	13,392	3,870	19,864
1980	3,385	2,295	17,808	5,313	25,416

TABLE II-2. TENURE AND VACANCY STATUS OF HOUSING UNITS IN MICHIGAN, BY COUNTY, CENSUS: 1970 AND 1980 (cont.)

County	Seasonal and migratory	Year-Round Housing Units			
		Vacant	Owner occupied	Renter occupied	Total
Washtenaw					
1970	925	2,843	39,192	29,386	71,421
1980	741	4,494	49,708	43,229	97,431
Wayne					
1970	247	39,404	563,609	266,832	869,845
1980	383	50,454	547,934	276,037	874,425
Wexford					
1970	504	1,107	5,025	1,209	7,341
1980	931	1,661	7,140	1,843	10,644
MICHIGAN					
1970	109,003	192,393	1,974,731	678,324	2,845,448
1980	141,577	253,110	2,321,884	873,131	3,448,125

SOURCE: Bureau of the Census, 1970 Census of Housing, Detailed Housing Characteristics, Michigan (Washington, D.C.: 1972), HC(1)-B24, Table 60 and 1980 Census of Housing Supplementary Reports Selected Housing Characteristics by States and Counties: 1980 (Washington, D.C.: 1981), HC80-S1-1, p. 150.

TABLE II-3. MEDIAN VALUE OF OWNER OCCUPIED HOUSING UNITS IN MICHIGAN, BY COUNTY, CENSUS: 1970 AND 1980

County	Value		County	Value	
	1970	1980		1970	1980
Alcona	12,400	32,500	Lake	6,700	19,800
Alger	9,400	27,500	Lapeer	15,900	42,300
Allegan	12,700	36,900	Leelanau	16,300	48,600
Alpena	12,800	32,200	Lenawee	14,700	36,700
Antrim	11,500	35,000	Livingston	19,700	61,000
Arenac	9,600	32,300	Luce	9,100	26,000
Baraga	10,200	28,800	Mackinac	8,700	28,400
Barry	12,100	33,100	Macomb	22,700	50,600
Bay	15,200	35,800	Manistee	11,100	30,700
Benzie	10,700	32,100	Marquette	12,500	37,800
Berrien	15,200	33,900	Mason	11,500	29,800
Branch	12,000	30,200	Mecosta	11,200	32,200
Calhoun	13,800	30,000	Menominee	10,300	29,900
Cass	12,200	33,300	Midland	19,000	44,900
Charlevoix	11,800	34,400	Misaukee	9,200	28,200
Cheboygan	12,300	32,600	Monroe	17,600	45,700
Chippewa	8,900	25,500	Montcalm	10,300	27,400
Clare	9,900	26,300	Montmorency	10,100	29,200
Clinton	16,400	43,300	Muskegon	12,500	27,700
Crawford	12,500	31,400	Newago	10,600	28,400
Delta	11,700	33,500	Oakland	23,200	56,300
Dickinson	10,200	32,000	Oceana	12,200	28,000
Eaton	17,900	45,600	Ogemaw	11,100	27,700
Emmet	14,500	40,700	Ontonagon	9,000	20,800
Genesee	16,300	35,500	Osceola	8,800	26,200
Gladwin	10,400	29,900	Oscoda	10,100	27,400
Gogebic	6,300	17,400	Otsego	16,100	39,000
Grand Traverse	16,300	45,000	Ottawa	16,600	44,800
Gratiot	11,400	27,200	Presque Isle	12,400	37,700
Hillsdale	11,400	30,300	Roscommon	13,100	29,000
Houghton	6,400	21,400	Saginaw	16,300	36,200
Huron	11,500	31,200	St. Clair	14,600	37,800
Ingham	17,900	39,800	St. Joseph	12,200	32,400
Ionia	11,200	31,100	Sanilac	11,800	31,000
Iosco	13,400	31,300	Schoolcraft	8,700	24,700
Iron	7,700	23,800	Shiawassee	13,800	35,100
Isabella	14,500	37,500	Tuscola	12,300	35,500
Jackson	14,600	33,100	Van Buren	12,400	33,300
Kalamazoo	16,600	40,800	Washtenaw	23,300	60,800
Kalkaska	9,200	32,500	Wayne	18,100	32,600
Kent	16,000	38,900	Wexford	9,600	29,200
Keweenaw	5,000	14,400	MICHIGAN	13,600	39,000

SOURCE: Bureau of the Census, 1970 Census of Housing, Detailed Housing Characteristics, Michigan (Washington, D.C.: 1972), HC(1)-B24, Table 61 and 1980 Census of Housing Supplementary Reports Selected Housing Characteristics by States and Counties; 1980 (Washington, D.C.: 1981), HC80-S1-1, p 150.

NOTE: Applies to all family homes on less than 10 acres with no business property.

TABLE II-4. MEDIAN CONTRACT RENT OF RENTER-OCCUPIED HOUSING UNITS IN MICHIGAN, BY COUNTY, CENSUS: 1970 AND 1980

County	Contract rent		County	Contract rent	
	1970	1980		1970	1980
Alcona	64	136	Lake	53	109
Alger	57	125	Lapeer	87	190
Allegan	77	167	Leelanau	72	183
Alpena	78	162	Lenawee	88	189
Antrim	70	167	Livingston	112	242
Arenac	63	134	Luce	57	140
Baraga	55	122	Mackinac	66	139
Barry	77	167	Macomb	143	259
Bay	86	189	Manistee	58	146
Benzie	59	152	Marquette	79	193
Berrien	88	179	Mason	68	152
Branch	73	168	Mecosta	95	159
Calhoun	88	175	Menominee	58	151
Cass	76	156	Midland	116	217
Charlevoix	81	176	Misaukee	56	152
Cheboygan	72	156	Monroe	93	199
Chippewa	69	154	Montclam	66	153
Clair	72	153	Montmorency	51	142
Clinton	88	190	Muskegon	76	159
Crawford	78	166	Newaygo	68	150
Delta	67	152	Oakland	151	286
Dickinson	65	164	Oceana	66	139
Eaton	110	227	Ogemaw	66	146
Emmet	80	186	Ontonagon	57	124
Genessee	111	208	Osceola	63	141
Gladwin	64	147	Oscoda	57	128
Gogebic	50	113	Otsego	86	181
Grand Traverse	91	219	Ottawa	82	199
Gratiot	70	157	Presque Isle	65	141
Hillsdale	73	158	Roscommon	67	152
Houghton	65	160	Saginaw	93	197
Huron	63	149	St. Clair	84	201
Ingham	125	223	St. Joseph	81	172
Ionia	74	155	Sanilac	63	155
Iosco	80	161	Schoolcraft	54	140
Iron	53	112	Shiawassee	84	178
Isabella	112	177	Tuscola	69	159
Jackson	94	188	Van Buren	74	159
Kalamazoo	111	211	Washtewaw	144	271
Kalkaska	64	172	Wayne	84	166
Kent	88	190	Wexford	70	158
Keweenaw	30	123	MICHIGAN	77	196

SOURCE: Bureau of the Census, 1970 Census of Housing, Detailed Housing Characteristics, Michigan (Washington,D.C.: 1972), HC(1)-B24, Table 61 and 1980 Census of Housing Supplementary Reports Selected Housing Characteristics by States and Counties: 1980 (Washington, D.C.: 1981), HC80-S1-1, p 150.

NOTE: Applies to all family homes on less than 10 acres with no business property.

TABLE II-5. PERCENTAGES OF MICHIGAN YEAR-ROUND HOUSING UNITS LACKING COMPLETE PLUMBING FOR EXCLUSIVE USE, BY COUNTY, CENSUS: 1970 AND 1980

	Percentage			Percentage	
County	1970	1980	County	1970	1980
Alcona	22.4	12.0	Lake	36.7	7.5
Alger	36.4	10.3	Lapeer	7.3	1.6
Allegan	7.4	2.0	Leelanau	9.1	3.1
Alpena	8.1	3.2	Lenawee	5.7	2.5
Antrim	13.2	3.2	Livingston	4.4	1.1
Arenac	17.5	5.6	Luce	21.2	6.1
Baraga	39.3	11.8	Mackinac	22.7	7.1
Barry	7.5	2.5	Macomb	1.2	0.5
Bay	4.3	1.7	Manistee	11.7	4.6
Benzie	18.1	3.2	Marquette	12.1	3.5
Berrien	3.5	1.8	Mason	10.5	2.7
Branch	8.0	2.6	Mecosta	11.1	3.9
Calhoun	3.6	1.4	Menominee	15.9	3.9
Cass	6.6	1.7	Midland	5.3	2.0
Charlevoix	7.6	2.5	Missaukee	24.4	7.5
Cheboygan	12.7	3.3	Monroe	5.9	1.9
Chippewa	11.7	4.6	Montcalm	10.4	3.7
Clare	46.7	6.6	Montmorency	32.0	7.5
Clinton	4.9	1.3	Muskegon	2.9	1.3
Crawford	9.8	7.8	Newaygo	18.2	3.9
Delta	15.5	4.8	Oakland	1.3	0.6
Dickinson	10.1	3.0	Oceana	14.8	3.1
Eaton	4.0	1.3	Ogemaw	35.2	13.8
Emmet	12.9	4.0	Ontonagon	34.2	9.1
Genesee	2.4	1.1	Osceola	9.6	6.6
Gladwin	38.7	6.1	Oscola	42.6	15.3
Gogebic	13.8	7.1	Otsego	10.9	4.0
Grand Traverse	5.4	2.0	Ottwaw	2.7	1.0
Gratiot	6.1	2.3	Presque Isle	13.7	4.2
Hillsdale	9.0	3.5	Roscommon	9.9	2.9
Houghton	21.1	8.8	Saginaw	3.6	1.2
Huron	9.7	2.9	St. Clair	6.0	2.1
Ingham	3.1	1.3	St. Joseph	5.2	1.6
Ionia	7.1	2.0	Sanilac	10.6	2.9
Iosco	13.1	7.1	Schoolcraft	21.1	7.0
Iron	18.8	4.2	Shiawassee	5.0	1.7
Isabella	7.5	2.4	Tuscola	9.7	2.6
Jackson	4.3	1.8	Van Buren	7.7	2.3
Kalamazoo	3.0	1.3	Washtenaw	2.4	1.6
Kalkaska	23.0	5.0	Wayne	2.3	1.5
Kent	2.3	1.1	Wexford	11.3	3.7
Keweenaw	35.4	14.8	MICHIGAN	4.3	1.8

SOURCE: Bureau of the Census, 1970 Census of Housing, Detailed Housing Characteristics, Michigan (Washington, D.C.: 1972), HC(1)-B24, Table 60 and 1980 Census of Housing Supplementary Reports Selected Housing Characteristics by States and Counties: 1980 (Washington D.C.: 1981), HC80-S1-1, p 150.

TABLE II-6. MEDIAN NUMBER OF ROOMS IN MICHIGAN YEAR-ROUND HOUSING UNITS, BY COUNTY, CENSUS: 1970 AND 1980

County	Median number of rooms 1970	Median number of rooms 1980	County	Median number of rooms 1970	Median number of rooms 1980
Alcona	4.7	4.5	Lake	4.3	4.5
Alger	4.7	5.0	Lapeer	5.5	5.7
Allegan	5.5	5.5	Leelanau	5.3	5.3
Alpena	5.2	5.3	Lenawee	5.7	5.6
Antrim	5.3	5.2	Livingston	5.4	5.9
Arenac	5.2	5.0	Luce	5.0	5.1
Baraga	4.8	5.0	Mackinac	4.7	5.0
Barry	5.5	5.5	Macomb	5.3	5.4
Bay	5.3	5.3	Manistee	5.3	5.3
Benzie	5.3	5.2	Marquette	5.0	5.1
Berrien	5.2	5.3	Mason	5.2	5.3
Branch	5.7	5.6	Mecosta	4.9	4.9
Calhoun	5.4	5.4	Menominee	5.2	5.3
Cass	5.2	5.4	Midland	5.4	5.6
Charlevoix	5.3	5.3	Misaukee	5.4	5.2
Cheboygan	5.2	5.2	Monroe	5.5	5.6
Chippewa	5.1	5.1	Montcalm	5.4	5.4
Clare	4.0	4.7	Montmorency	4.4	4.6
Clinton	5.7	5.9	Muskegon	5.1	5.2
Crawford	4.9	4.7	Newaygo	5.0	5.2
Delta	5.2	5.2	Oakland	5.5	5.6
Dickinson	5.2	5.2	Oceana	5.4	5.4
Eaton	5.8	5.7	Ogemaw	4.3	4.6
Emmet	5.4	5.3	Ontonagon	4.9	5.1
Genesee	5.2	5.3	Osceola	5.7	5.3
Gladwin	4.4	4.5	Oscoda	4.2	4.3
Gogebic	5.2	5.2	Otsego	4.8	5.2
Grand Traverse	5.3	5.3	Ottawa	5.5	5.7
Gratiot	5.8	5.8	Presque Isle	5.2	5.2
Hillsdale	5.9	5.7	Roscommon	4.3	4.5
Houghton	5.5	5.4	Saginaw	5.4	5.4
Huron	5.6	5.5	St. Clair	5.4	5.5
Ingham	5.1	5.1	St. Joseph	5.5	5.5
Ionia	5.8	5.8	Sanilac	5.6	5.6
Iosco	4.7	4.7	Schoolcraft	5.1	5.3
Iron	5.2	5.2	Shiawassee	5.6	5.7
Isabella	5.2	5.2	Tuscola	5.5	5.6
Jackson	5.4	5.5	Van Buren	5.3	5.3
Kalamazoo	5.2	5.3	Washtenaw	5.0	5.0
Kalkaska	4.8	4.9	Wayne	5.2	5.3
Kent	5.5	5.5	Wexford	5.3	5.2
Keweenaw	5.4	5.3	MICHIGAN	5.3	5.4

SOURCE: Bureau of the Census, 1970 Census of Housing, Detailed Housing Characteristics, Michigan (Washington, D.C.: 1972), HC(1)-B24, Table 60 and 1980 Census of Housing Supplementary Reports Selected Housing Characteristics by States and Counties: 1980 (Washington, D.C.: 1981), HC80-S1-1,p 150.

TABLE II-7. SELECTED CHARACTERISTICS OF FHA-INSURED HOMES UNDER SECTION 203 IN MICHIGAN AND THE UNITED STATES: 1974-1980

	New homes		Existing homes	
Year	Michigan	United States	Michigan	United States
		Median property value (dollars)		
1974	28,835	27,603	18,983	22,123
1975	31,761	32,808	20,231	26,051
1976	32,324	35,278	21,439	27,011
1977	34,882	37,487	23,101	29,252
1978	39,636	41,863	22,871	33,425
1979	43,611	50,406	26,732	38,442
1980	n.a.	56,042	34,389	44,054
		Average construction cost per square foot		
1974	22.17	18.68	--	--
1975	24.26	20.49	--	--
1976	25.92	21.69	--	--
1977	27.80	23.39	--	--
1978	30.69	25.95	--	--
1979	35.78	29.87	--	--
1980	38.96	34.40	--	--
		Average market price of site		
1974	5,164	5,372	3,065	4,451
1975	5,664	6,329	3,257	5,423
1976	6,102	6,963	3,261	5,641
1977	6,169	7,279	3,438	5,878
1978	6,901	7,993	3,409	7,052
1979	7,482	9,816	3,920	8,145
1980	6,695	11,809	5,163	10,105
		Median improved living area (square feet)		
1974	1,068	1,213	910	1,067
1975	1,059	1,309	919	1,118
1976	1,064	1,313	923	1,098
1977	1,043	1,294	934	1,097
1978	1,041	1,316	899	1,103
1979	1,044	1,351	921	1,111
1980	1,023	1,297	939	1,111
		Percentage with full basement		
1974	84.3	15.3	73.3	32.9
1975	76.0	15.3	74.7	26.9
1976	73.3	11.8	71.8	23.2
1977	84.4	11.4	73.5	23.0
1978	91.9	11.8	71.9	23.4
1979	92.4	9.6	71.3	25.4
1980	84.7	12.4	68.4	28.0

SOURCE: Federal Housing Administration, FHA Homes, 1974 through 1980 (Washington, D.C.: annually), Tables 5S, 7S, 8S, and 14S.

n.a. not available - inadequate sample.

III. HEALTH AND VITAL STATISTICS

Michigan Health Statistics, published annually by the Michigan Center for Statistics, Michigan Department of Public Health, is the major source of vital statistics presented here. Births and deaths are estimated on the basis of registrations, which are not complete. In 1950, a test done in connection with the Census of Population revealed that registration of births in Michigan was 98.7 percent complete. The Center for Health Statistics believes that death registrations exceed birth registrations because a death certificate is required for the issuance of a burial permit. Delayed registrations of births and deaths cause negligible statistical aberrations.

Since 1950, births and deaths among nonresidents, but taking place in Michigan, have been exlcuded from the state data; births and deaths among Michigan residents taking place in other states or countries are included. Allocation intrastate is on the basis of county of residence. An effort is made to determine the city of residence, but for a large number of births and deaths in each county it is impossible to determine this jurisdiction from the registration form. Live birth and death statistics for counties appear in Table III-17; some related statistics, used in determining net migration for counties, appear in Table I-5.

Revisions in the International List of Causes of Death affect the comparability of these data over time. The eighth revision has been the basis for cause of death classification in Michigan since 1968.

Annual information about registered hospitals is published in Hospitals, Journal of the American Hospital Association. Michigan Department of Public Health compilations exclude federal hospitals and hospitals licensed by the Michigan Department of Mental Health. The latter has jurisdiction over state hospitals for the mentally ill as well as state homes and training schools for the mentally retarded.

Those with a special interest in the death rate from motor vehicle accidents should consult chapter XVII.

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TABLE III-1. LIVE BIRTHS AND DEATHS OF MICHIGAN AND U.S. RESIDENTS: 1945-1980

	Michigan		United States	
Year	Live births	Deaths	Live births	Deaths
1945	111,557	53,641	2,735,456	1,401,719
1946	138,572	54,856	3,288,672	1,395,617
1947	160,275	56,807	3,699,940	1,445,370
1948	153,726	56,520	3,535,068	1,444,337
1949	156,469	57,107	3,559,529	1,443,607
1950	160,055	57,567	3,554,149	1,452,454
1951	172,451	59,181	3,750,850	1,482,099
1952	177,835	59,138	3,846,986	1,496,838
1953	182,968	62,087	3,902,120	1,517,541
1954	192,104	60,706	4,017,362	1,481,091
1955	196,294	63,087	4,047,295	1,528,717
1956	206,068	64,352	4,163,090	1,564,476
1957	208,488	66,435	4,254,784	1,633,128
1958	202,690	65,899	4,203,812	1,647,886
1959	198,301	66,812	4,244,796	1,656,814
1960	195,056	67,912	4,257,850	1,711,982
1961	192,825	67,375	4,268,326	1,701,522
1962	182,790	70,049	4,167,362	1,756,720
1963	178,871	72,438	4,098,020	1,813,549
1964	175,103	72,129	4,027,490	1,798,051
1965	166,464	73,665	3,760,358	1,828,136
1966	165,794	74,596	3,606,274	1,863,149
1967	162,756	75,360	3,520,959	1,851,323
1968	159,058	76,855	3,501,564	1,930,082
1969	165,760	76,693	3,600,206	1,921,990
1970	171,667	76,321	3,731,386	1,921,031
1971	162,244	77,395	3,555,970	1,927,542
1972	146,854	79,210	3,258,411	1,963,944
1973	141,550	78,522	3,136,965	1,973,003
1974	137,414	76,143	3,159,958	1,934,388
1975	133,931	74,522	3,144,198	1,892,879
1976	131,378	75,801	3,167,788	1,909,440
1977	138,416	74,144	3,326,632	1,899,597
1978	138,802	74,773	3,333,279	1,927,788
1979	144,452	73,480	3,473,000[p]	1,906,000[p]
1980	144,129[p]	74,128[p]	3,598,000[p]	1,986,000[p]

SOURCE: Michigan Department of Public Health, Michigan Health Statistics, 1978 (Lansing: 1981), and special release; and National Center for Health Statistics, Vital Statistics of the United States (Washington, D.C.: 1964) and Monthly Vital Statistics Report (Washington, D.C.: monthly).

p: provisional

TABLE III-2. LIVE BIRTH AND DEATH RATES PER 1,000 POPULATION OF MICHIGAN AND U.S. RESIDENTS: 1945-1980

	Michigan		United States	
Year	Live births	Deaths	Live births	Deaths
1945	20.5	9.9	19.5	10.6
1946	24.3	9.6	23.3	10.0
1947	26.4	9.4	25.8	10.1
1948	24.8	9.1	24.2	9.9
1949	24.6	9.0	23.9	9.7
1950	25.1	9.0	23.6	9.6
1951	26.3	9.0	24.5	9.7
1952	26.5	8.8	24.7	9.6
1953	26.7	9.1	24.7	9.6
1954	27.3	8.6	24.9	9.2
1955	27.1	8.7	24.6	9.3
1956	27.4	8.6	24.9	9.4
1957	26.7	8.5	25.0	9.6
1958	25.8	8.4	24.3	9.5
1959	24.9	8.4	24.0	9.4
1960	24.9	8.7	23.7	9.5
1961	24.4	8.5	23.3	9.3
1962	23.0	8.8	22.4	9.5
1963	22.3	9.0	21.7	9.6
1964	21.6	8.9	21.0	9.4
1965	20.3	9.0	19.4	9.4
1966	19.9	9.0	18.4	9.5
1967	18.9	8.7	17.8	9.4
1968	18.3	8.9	17.5	9.7
1969	19.0	8.8	17.8	9.5
1970	19.3	8.6	18.4	9.5
1971	18.0	8.6	17.2	9.3
1972	16.3	8.8	15.6	9.4
1973	15.6	8.7	14.9	9.4
1974	15.1	8.4	14.9	9.2
1975	14.6	8.1	14.8	8.9
1976	14.4	8.3	14.8	8.9
1977	15.2	8.1	15.4	8.8
1978	15.1	8.1	15.3	8.8
1979	15.7	8.0	15.8[p]	8.7[p]
1980	15.6[p]	8.0[p]	16.2[p]	8.9[p]

SOURCE: Michigan Department of Public Health, Michigan Health Statistics, 1978 (Lansing: 1981), and special release; and National Center for Health Statistics, Vital Statistics of the United States (Washington, D.C.: 1964) and Monthly Vital Statistics Report (Washington, D.C.: monthly).

p: provisional.

TABLE III-3. FERTILITY RATES, MICHIGAN AND THE UNITED STATES, SELECTED YEARS: 1900-1979

Year	Michigan	United States
1900	78.5	n.a.
1910	99.0	126.8
1920	111.6	117.9
1930	87.6	89.2
1940	78.9	79.9
1950	110.5	106.2
1960	123.1	118.0
1970	91.7	87.6
1971	84.7	81.9
1972	76.5	73.4
1973	72.2	69.2
1974	70.0	68.4
1975	67.1	66.7
1976	68.7	65.8
1977	71.1	67.8
1978	69.9	66.6
1979	71.5	68.0[p]

SOURCE: Michigan Department of Public Health, Michigan Health Statistics, 1978 (Lansing: 1981), Table 1.3; and Michigan Department of Public Health, special release (1979 data).
n.a.: not available.
p.: provisional

TABLE III-4. LIVE BIRTHS BY RACE, MICHIGAN RESIDENTS: 1963-1979

	White		Negro and other minority races[a]		
Year	Number	Percentage of total births	Number	Percentage of total births	Total
1963	158,914	88.8	19,957	11.2	178,871
1964	154,790	88.4	20,313	11.6	175,013
1965	145,784	87.6	20,680	12.4	166,464
1966	143,876	86.8	21,918	13.2	165,794
1967	139,721	85.8	23,035	14.2	162,756
1968	135,436	85.1	23,622	14.9	159,058
1969	140,222	84.6	25,538	15.4	165,760
1970	143,871	83.8	27,796	16.2	171,667
1971	134,165	82.7	28,079	17.3	162,244
1972	119,787	81.6	27,066	18.4	146,854
1973	114,878	81.2	26,672	18.8	141,550
1974	112,474	81.9	24,940	18.1	137,414
1975	109,718	81.9	24,213	18.1	133,931
1976	107,907	82.1	23,471	17.9	131,378
1977	114,042	82.4	24,374	17.6	138,416
1978	114,217	82.3	24,585	17.7	138,802
1979	118,671	82.2	25,781	17.8	144,452

SOURCE: Michigan Department of Public Health, Michigan Health Statistics, 1978 (Lansing: 1981), Table 1.4; and Michigan Department of Public Health, special release.
a. Indians from India were counted as "white" from 1970-1977, and with "other" in 1978 and 1979.

TABLE III-5. LIVE BIRTHS, BY LIVE BIRTH ORDER, MICHIGAN RESIDENTS, 1969 AND 1979

Live birth order	No. of births 1969	No. of births 1979	Percentage of total 1969	Percentage of total 1979
First birth	56,497	60,424	34.1	41.8
Second birth	42,774	46,595	25.8	32.3
Third birth	26,573	22,670	16.0	15.7
Fourth birth	15,936	8,119	9.6	5.6
Fifth birth or greater	22,949	5,296	13.8	3.7
Not stated	1,040	1,348	0.6	0.9
TOTAL	165,769	144,452	99.9	100.0

SOURCE: Michigan Department of Public Health, special release.

TABLE III-6. FIRST BIRTHS, MICHIGAN AND U.S. RESIDENTS: 1969-1979

Year	Michigan First births	Michigan Percentage of all births	United States First births	United States Percentage of all births
1969	56,497	34.1	1,353,278	37.6
1970	64,222	37.4	1,430,[illegible]	38.3
1971	60,413	37.2	1,375,668	38.7
1972	57,477	39.1	1,289,257	39.6
1973	57,411	40.6	1,243,358	39.6
1974	56,233	40.9	1,314,194	41.6
1975	55,348	41.3	1,319,126	42.0
1976	54,003	41.1	1,324,811	41.8
1977	56,622	40.9	1,387,143	41.7
1978	57,767	41.6	1,401,491	42.0
1979	60,424	41.8	n.a.	n.a.

SOURCE: Michigan Department of Public Health, Michigan Health Statistics, 1978 (Lansing: 1981), Table 1.10; and Michigan Department of Public Health, special release (1979 data).

n.a.: not available.

TABLE III-7. LIVE BIRTHS BY AGE OF MOTHER, MICHIGAN RESIDENTS: 1945-1979

Year	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Age not given
1945	73	9,294	32,790	33,143	22,831	11,185	2,970	229	140
1946	72	10,899	45,999	41,985	25,184	11,811	3,002	223	102
1947	91	15,594	55,954	47,793	26,296	12,009	3,073	182	93
1948	95	16,245	53,520	45,059	25,268	11,391	2,888	173	91
1949	117	16,404	53,608	46,363	25,971	11,565	2,906	181	63
1950	111	16,310	53,442	48,186	27,422	12,392	2,831	169	92
1951	104	17,974	57,340	52,044	29,674	13,086	3,040	160	84
1952	134	17,206	58,012	54,198	31,756	13,880	3,176	220	52
1953	166	18,510	58,070	54,734	32,948	14,798	3,350	190	44
1954	208	20,522	50,776	55,962	35,152	15,862	3,598	220	32
1955	195	21,417	61,952	56,462	35,968	16,554	3,862	198	15
1956	192	22,808	66,332	58,392	36,870	17,282	4,172	164	14
1957	190	23,798	67,086	58,424	36,980	17,956	4,160	200	14
1958	222	23,034	65,834	55,130	36,278	17,892	4,296	196	18
1959	200	21,922	65,426	53,434	34,934	18,030	4,424	198	8
1960	186	22,786	65,108	51,842	33,228	17,410	4,288	202	6
1961	212	23,891	64,336	50,277	32,456	17,067	4,363	203	20
1962	268	22,702	62,243	47,109	29,817	16,160	4,250	224	17
1963	210	21,686	62,834	46,063	28,364	15,117	4,359	229	9
1964	264	22,526	62,196	44,671	26,542	14,509	4,162	220	13
1965	267	24,653	59,439	40,693	23,767	13,528	3,886	211	20
1966	310	28,690	60,711	39,225	21,205	11,846	3,547	223	37
1967	316	27,267	61,541	40,052	19,840	10,479	3,059	178	24
1968	400	26,390	60,072	41,561	18,613	9,095	2,739	163	25
1969	421	28,061	63,376	44,615	18,535	8,157	2,433	134	28
1970	489	29,764	65,892	46,262	19,003	7,904	2,223	118	12
1971	472	28,480	62,367	43,639	18,259	6,975	1,926	112	14
1972	503	28,108	54,199	40,442	16,133	5,805	1,555	95	14
1973	569	27,808	51,284	39,845	15,520	5,163	1,277	62	22
1974	501	25,977	49,975	40,215	15,317	4,291	1,063	50	25
1975	463	24,509	48,675	40,061	14,891	4,273	982	54	23
1976	404	22,593	47,161	41,412	14,893	4,053	799	47	16
1977	426	22,585	49,740	43,346	17,293	4,178	771	51	26
1978	345	21,487	49,498	43,744	18,367	4,562	729	50	20
1979	355	21,239	51,319	46,084	19,962	4,720	715	41	17

SOURCE: Michigan Department of Public Health, Michigan Health Statistics, 1978 (Lansing: 1981), Table 4.3, and special release (1979 data).

NOTE: Total live birth figures are presented in Table III-1.

TABLE III-8. LIVE BIRTH RATES BY AGE OF MOTHER, MICHIGAN RESIDENTS: 1945-1979

Year	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Total fertility rate[a]
1945	0.3	40.8	135.5	133.4	98.5	52.1	15.4	1.3	2,386.5
1946	0.3	48.3	188.5	165.3	106.2	53.8	15.3	1.2	2,894.5
1947	0.4	69.7	227.3	184.2	108.4	53.6	15.4	1.0	3,300.0
1948	0.4	73.2	215.5	170.0	101.9	49.8	14.2	1.0	3,130.0
1949	0.5	74.6	214.0	171.4	102.5	49.6	14.1	1.0	3,138.5
1950	0.5	74.6	212.0	175.5	106.5	52.3	13.6	0.9	3,179.5
1951	0.4	79.1	229.0	192.2	114.4	53.9	14.1	0.8	3,419.5
1952	0.5	73.5	233.0	202.5	121.7	56.1	14.4	1.1	3,514.0
1953	0.6	76.8	234.5	207.0	125.5	58.7	14.9	0.9	3,594.5
1954	0.7	82.8	246.8	214.1	133.1	61.8	15.6	1.1	3,780.0
1955	0.6	84.1	253.0	218.6	135.4	63.4	16.4	0.9	3,862.0
1956	0.6	87.2	272.4	228.9	138.0	65.0	17.4	0.8	4,051.5
1957	0.6	88.6	277.1	231.8	137.6	66.4	17.0	0.9	4,100.0
1958	0.6	83.6	273.4	221.5	134.3	65.0	17.2	0.9	3,982.5
1959	0.6	77.6	273.3	217.4	128.6	64.4	17.3	0.9	3,900.5
1960	0.5	79.3	273.1	213.0	121.8	61.4	16.6	0.9	3,833.0
1961	0.6	78.1	252.0	200.7	120.2	61.3	16.8	0.9	3,653.0
1962	0.7	70.7	231.5	183.9	111.4	58.9	16.3	0.9	3,371.5
1963	0.5	64.6	222.5	175.9	107.0	55.9	16.6	0.9	3,219.5
1964	0.6	64.2	210.1	167.0	101.0	54.4	15.8	0.9	3,070.0
1965	0.6	67.4	192.0	149.0	91.2	51.5	14.7	0.8	2,836.0
1966	0.7	75.4	187.9	140.7	82.1	45.8	13.4	0.9	2,734.5
1967	0.7	69.0	182.8	140.8	77.6	41.2	11.5	0.7	2,621.5
1968	0.9	64.3	171.5	143.2	73.4	36.3	10.2	0.6	2,502.0
1969	0.9	66.0	174.2	150.8	73.8	33.1	9.1	0.5	2,542.0
1970	1.0	68.2	176.2	154.2	76.2	32.4	8.3	0.4	2,584.5
1971	1.0	63.5	157.3	141.4	71.8	28.8	7.3	0.4	2,357.5
1972	1.0	62.5	136.4	130.7	63.4	23.9	5.8	0.3	2,120.0
1973	1.2	60.1	131.9	120.9	55.8	22.1	4.7	0.2	1,984.5
1974	1.1	55.4	126.0	120.2	52.4	18.1	4.5	0.2	1,889.5
1975	1.0	51.7	118.8	116.8	49.2	17.7	4.3	0.2	1,798.5
1976	0.9	47.7	122.1	120.8	48.7	18.4	4.3	0.2	1,815.5
1977	0.9	47.6	127.4	130.5	52.8	17.6	4.2	0.2	1,906.0
1978	0.7	45.6	125.3	132.3	53.8	17.5	3.9	0.2	1,896.5
1979	0.8	45.6	128.0	138.3	57.3	16.9	3.7	0.2	1,954.0

SOURCE: Michigan Department of Public Health, Michigan Health Statistics, 1978 (Lansing: 1981), Table 4.4, and special release (1979 data).

NOTE: Live birth rates are per 1,000 women in specified age group.

a. Total fertility rate is total children to 1,000 women in their lifetime assuming constant live birth rates.

TABLE III-9. INFANT, NEONATAL, POSTNEONATAL, PERINATAL, FETAL AND MATERNAL DEATHS, MICHIGAN RESIDENTS: 1945-1980

Year	Under 1 year	Under 28 days	28-364 days	Perinatal	Fetal	Maternal
1945	4,008	2,670	1,338	4,906	2,703	166
1946	4,541	3,323	1,218	5,978	3,168	163
1947	5,055	3,677	1,378	1,378	3,422	173
1948	4,617	3,352	1,265	5,968	3,132	120
1949	4,520	3,232	1,288	5,746	2,994	105
1950	4,214	3,043	1,171	5,781	3,095	91
1951	4,505	3,296	1,209	6,088	3,158	94
1952	4,689	3,414	1,275	6,266	3,224	82
1953	4,728	3,389	1,339	6,188	3,180	79
1954	4,795	3,560	1,235	6,415	3,249	94
1955	4,873	3,707	1,166	6,381	3,029	61
1956	5,047	3,796	1,251	6,655	3,245	84
1957	5,093	3,884	1,209	6,668	3,154	79
1958	4,980	3,789	1,191	6,516	3,101	69
1959	4,846	3,674	1,172	6,250	2,928	72
1960	4,702	3,580	1,122	6,247	3,008	75
1961	4,604	3,475	1,129	5,875	2,735	78
1962	4,367	3,251	1,116	5,669	2,703	56
1963	4,150	3,109	1,041	5,407	2,540	71
1964	4,043	3,071	972	5,293	2,466	62
1965	3,936	2,909	1,027	5,139	2,475	54
1966	3,751	2,830	921	4,909	2,295	54
1967	3,595	2,714	881	4,693	2,195	52
1968	3,438	2,617	821	4,476	2,064	44
1969	3,356	2,550	806	4,488	2,175	27
1970	3,492	2,683	809	4,522	2,060	29
1971	3,157	2,412	745	4,139	1,923	32
1972	2,801	2,115	686	3,700	1,770	35
1973	2,561	1,902	659	3,392	1,682	26
1974	2,387	1,734	653	2,960	1,451	19
1975	2,205	1,563	642	2,690	1,373	16
1976	1,978	1,424	554	2,502	1,271	14
1977	1,945	1,367	578	2,456	1,288	11
1978	1,931	1,281	650	2,322	1,221	15
1979	1,921	1,295	626	2,326	1,216	11
1980	1,878p	n.a.	n.a.	n.a.	1,168	n.a.

SOURCE: Michigan Department of Public Health, Michigan Health Statistics, 1978 (Lansing: 1981), Table 4.1, and special release (1979 and 1980 data).
p: provisional.
n.a.: not available.

TABLE III-10. NUMBER OF DEATHS BY SIX LEADING CAUSES AMONG MICHIGAN RESIDENTS: 1945-1980

Year	Heart disease	Cancer (all forms)	Cerebro-vascular disease	Accidents		Diabetes	Pneumonia and Influenza
				Motor vehicle	All forms		
1945	17,421	7,486	5,295	1,199	3,432	1,561	2,138
1946	17,691	7,845	5,224	1,506	3,776	1,530	2,119
1947	18,412	8,188	5,426	1,499	3,848	1,618	2,276
1948	18,726	8,336	5,272	1,545	4,017	1,771	1,929
1949	19,137	8,697	5,438	1,493	3,838	1,884	1,968
1950	20,521	8,685	6,376	1,680	3,783	1,438	1,481
1951	21,118	9,187	6,579	1,806	3,916	1,374	1,892
1952	21,247	9,256	6,521	1,815	3,901	1,339	1,693
1953	22,425	9,904	7,045	2,051	4,375	1,419	1,777
1954	22,362	10,105	6,964	1,916	3,948	1,469	1,437
1955	23,440	10,297	7,362	2,129	4,213	1,415	1,599
1956	24,661	10,489	7,114	1,826	3,925	1,443	1,779
1957	25,369	10,810	7,632	1,680	3,643	1,510	2,237
1958	25,215	10,946	7,547	1,466	3,306	1,595	2,209
1959	25,323	11,113	7,700	1,587	3,666	1,715	1,920
1960	25,728	11,331	7,682	1,710	3,688	1,784	2,224
1961	25,519	11,476	7,745	1,656	3,692	1,778	1,762
1962	27,226	11,752	7,783	1,668	3,758	1,908	1,954
1963	27,483	12,078	8,168	2,005	4,033	2,049	2,229
1964	27,496	12,087	7,940	2,286	4,416	2,055	1,754
1965	28,134	12,419	7,769	2,271	4,494	2,153	2,086
1966	28,277	12,506	7,732	2,407	4,737	2,243	2,085
1967	28,757	13,030	7,846	2,265	4,519	2,182	2,051
1968	29,680	13,292	7,913	2,466	4,603	2,298	2,577
1969	29,396	13,328	7,706	2,529	4,766	2,188	2,439
1970	29,204	13,551	7,691	2,309	4,428	2,180	2,101
1971	30,095	13,594	7,826	2,274	4,426	2,103	2,058
1972	30,865	14,045	7,999	2,450	4,566	2,222	2,201
1973	29,944	14,220	7,987	2,389	4,630	2,074	2,090
1974	29,220	14,241	7,645	1,929	4,211	1,940	1,698
1975	28,298	14,445	7,262	1,841	4,002	1,819	1,825
1976	29,233	14,880	7,354	1,993	3,912	1,719	2,106
1977	28,895	15,125	6,818	1,960	3,945	1,615	1,660
1978	29,406	15,249	6,520	2,138	3,970	1,551	2,003
1979	29,296	15,409	6,067	1,967	3,839	1,449	1,475
1980	29,463p	15,606p	6,115p	1,832p	3,524p	1,441p	1,757p

SOURCE: Michigan Department of Public Health, Michigan Health Statistics, 1978 (Lansing: 1981), Table 4.8; and special release.
p: provisional

TABLE III-12. DEATH RATES AMONG MICHIGAN RESIDENTS, BY AGE AND SEX: 1978 AND 1979

Age	1978			1979		
	Male	Female	Total	Male	Female	Total
All ages	914.2	716.4	813.7	897.8	701.6	798.1
0-4 years	375.6	279.7	329.3	369.2	288.9	330.8
5-9 years	35.0	23.3	29.3	30.2	21.2	25.8
10-14 years	37.3	18.0	27.8	31.9	23.1	27.6
15-19 years	140.4	53.4	96.9	130.3	44.9	87.8
20-24 years	224.1	81.3	150.9	197.9	76.1	135.6
25-29 years	299.1	78.9	172.4	261.7	94.8	167.1
30-34 years	179.7	87.6	133.9	191.9	80.1	134.4
35-39 years	204.3	140.8	175.1	186.6	131.0	161.0
40-44 years	380.3	276.8	331.7	376.5	240.6	313.0
45-49 years	579.1	383.6	484.5	593.2	368.1	485.0
50-54 years	868.4	502.1	682.7	875.5	473.9	673.0
55-59 years	1,370.0	720.1	1,032.1	1,313.6	729.4	1,010.3
60-64 years	2,281.3	1,214.0	1,725.5	2,208.3	1,126.9	1,640.5
65-69 years	3,561.0	1,938.5	2,695.9	3,467.5	1,792.6	2,574.5
70-74 years	5,828.5	3,071.3	4,272.4	5,559.4	3,049.5	4,140.2
75-79 years	7,635.7	4,403.4	5,698.1	7,748.0	4,233.6	5,642.1
80-84 years	7,914.1	5,923.2	6,712.2	7,729.0	5,784.5	6,545.8
85 and over	13,898.6	13,726.2	13,789.5	13,649.8	13,312.4	13,435.6

SOURCES: Michigan Department of Public Health, special release.

NOTE: Rates per 100,000 population.

TABLE III-11. NUMBER OF DEATHS AMONG MICHIGAN RESIDENTS, BY SIXTEEN LEADING CAUSES[1], BY SEX AND AGE GROUP: 1979

Cause	Sex			Age group					
	Male	Female	Total	Under 1 year	1-19 years	20-44 years	45-64 years	65 and over	Not stated
Diseases of heart	16,105	13,191	29,296	33	39	687	6,397	22,139	1
Cancer	8,537	6,871	15,409	4	155	682	5,416	9,152	--
Cerebrovascular	2,655	3,412	6,067	7	16	155	813	5,076	--
Accident & adverse effects	2,619	1,220	3,839	54	840	1,402	664	879	--
Chronic obstructive pulmonary diseases and allied conditions[2]	1,426	508	1,934	4	5	33	433	1,459	--
Pneumonia and Influenza	786	688	1,475	30	22	54	176	1,193	--
Diabetes Mellitus	592	857	1,449	--	4	65	321	1,058	1
Chronic Liver disease and cirrhosis	947	420	1,367	--	--	239	746	382	--
Atherosclerosis	469	704	1,173	--	--	1	53	1,119	--
Suicide	848	295	1,143	--	94	575	312	162	--
Certain conditions originating in the perinatal period	584	438	1,024	1,015	5	1	--	2	1
Homicide & legal intervention	665	217	882	8	119	577	140	43	1
Nephritis, nephrotic syndrome, & nephrosis	316	285	601	7	2	35	114	443	--
Congenital anomalies	285	251	539	344	83	42	38	32	--
Septicemia	150	150	300	9	7	13	53	218	--
Hypertension with or without renal disease	130	139	269	--	--	11	59	199	--
All other causes	3,538	3,174	6,713	406	239	663	1,487	3,917	1
TOTAL	40,652	32,820	73,480[3]	1,921	1,630	5,229	17,222	47,473	5

SOURCE: Michigan Department of Public Health, special release.

1. Cause of death ranking is based on the list of 72 Selected Causes of Death used by National Center for Health Statistics beginning in 1979.
2. Includes bronchitis, emphysema, and other chronic obstructive pulmonary diseases and allied conditions.
3. Male and female deaths do not seem to total due to eight deaths with sex unknown.

TABLE III-13. DEATHS FROM ACCIDENTS BY EXTERNAL CAUSE OF INJURY, MICHIGAN RESIDENTS: 1971-1979[1]

Cause of injury	1971	1972	1973	1974	1975	1976	1977	1978	1979
Transport, total	2,410	2,609	2,542	2,040	1,961	2,093	2,094	2,237	2,074
Motor vehicle	2,274	2,450	2,389	1,929	1,841	1,993	1,993	2,138	1,967
Railroad	21	15	11	10	10	9	8	13	9
Other road vehicle, nontraffic	5	11	6	5	4	6	2	2	6
Water transportation	64	62	67	47	56	35	33	58	40
Air transportation	46	71	69	49	50	50	58	26	52
Nontransport, total	1,969	1,924	2,004	2,106	1,978	1,763	1,781	1,663	1,664
Poisoning	214	225	229	232	246	223	156	162	159
Falls	674	653	652	685	618	580	564	537	549
Blow from falling object	48	32	36	36	32	35	45	34	46
Machinery	22	31	24	22	32	22	21	19	38
Electric current	39	39	42	33	46	30	55	30	28
Fire and explosion of combustible material	325	277	283	337	274	251	311	245	276
Hot substance or object, caustic or corrosive material & steam	12	8	10	8	12	5	3	11	8
Firearm	70	69	75	87	67	53	60	37	58
Inhalation or ingestion of food or other object	125	118	135	151	139	143	105	141	144
Mechanical suffocation	43	57	39	49	38	41	28	38	44
Drowning or submersion	224	244	294	275	293	235	238	205	185
Other causes	173	171	185	191	181	145	195	204	129
Surgical & medical misadventures & late complications, late effects of injury and poisoning[2]	47	33	84	65	63	56	70	70	101
TOTAL	4,426	4,566	4,630	4,211	4,002	3,912	3,945	3,970	3,839

SOURCE: Michigan Department of Public Health, special release.

1. Deaths in 1979 are coded by the 9th Revision International Classification of Diseases, WHO, while those in 1970-1978 were coded by the 8th Revision International Classification of Diseases, Adapted, National Center for Health Statistics Comparability ratios are not available so comparisons of death rates for these categories between 1978 and 1979 should be made with caution.
2. 9th Revision ICD codes used are E870-E879 and E929-E949. 8th Revision ICDA codes used are E930-E949.

TABLE III-14. LIFE EXPECTANCY AT BIRTH, BY SEX, MICHIGAN AND U.S. RESIDENTS, SELECTED YEARS: 1901-1979

	Michigan[a]		United States	
Year	Male life expectancy	Female life expectancy	Male life expectancy	Female life expectancy
1901	53.4	55.1	47.6	50.6
1910	53.9	56.2	48.4	51.8
1920	55.1	56.0	53.6	54.6
1930	59.8	62.8	58.1	61.6
1940	63.4	67.4	60.8	65.2
1950	65.7	71.2	65.6	71.1
1960	67.1	73.3	66.6	73.1
1970	67.2	74.6	67.1	74.8
1971	67.3	74.9	67.4	75.0
1972	67.3	74.9	67.4	75.1
1973	67.4	75.0	67.6	75.3
1974	68.0	75.3	68.1	75.8
1975	68.5	75.7	68.7	76.5
1976	69.0	75.9	69.0	76.7
1977	69.3	76.3	69.3	77.1
1978	69.6	76.4	69.5	77.2
1979	70.0	76.8	n.a.	n.a.

SOURCE: Michigan Department of Public Health, Michigan Health Statistics, 1978 (Lansing: 1981), Table 2.73; and special release (1979 data).
a. Michigan data for 1920, 1930, and 1940 are for white only.
n.a.: not available.

TABLE III-15. LIFE EXPECTANCY AT BIRTH, BY SEX AND RACE, MICHIGAN RESIDENTS: 1950, 1960, 1970, AND 1979

Population subgroup	Year			
	1950	1960	1970	1979
White				
Female	71.9	74.0	75.3	77.5
Male	66.2	67.5	68.2	70.7
Total white	68.8	70.5	71.6	74.1
All other				
Female	63.4	67.7	69.4	72.9
Male	60.4	63.6	61.0	65.4
Total all other	61.8	65.6	65.0	69.1
Total				
Female	71.2	73.3	74.6	76.8
Male	65.7	67.1	67.2	70.0
Total population	68.3	70.0	70.8	73.3

SOURCE: Michigan Department of Public Health, Michigan Health Statistics, 1978 (Lansing: 1981), Table 2.74; and special release (1979 data).

TABLE III-17. LIVE BIRTHS AND DEATHS, AND RATES, AMONG MICHIGAN RESIDENTS, BY COUNTY: 1978 AND 1979

	Live births				Deaths			
	Number		Rate[a]		Number		Rate[a]	
County	1978	1979	1978	1979	1978	1979	1978	1979
Alcona	104	95	11.2	10.3	125	116	13.4	12.6
Alger	134	133	13.4	13.4	103	92	10.3	9.3
Allegan	1,307	1,272	17.7	16.8	599	564	8.1	7.4
Alpena	480	497	14.4	14.9	278	270	8.3	8.1
Antrim	254	258	15.6	15.4	169	144	10.4	8.6
Arenac	200	225	14.8	16.1	151	130	11.2	9.3
Baraga	157	137	18.3	15.7	93	95	10.8	10.9
Barry	661	726	15.4	16.8	339	348	7.9	8.1
Bay	1,880	1,882	15.5	15.7	913	961	7.5	8.0
Benzie	152	169	14.3	15.4	110	122	10.4	11.1
Berrien	2,702	2,904	16.2	17.4	1,492	1,508	8.9	9.0
Branch	589	648	15.1	16.7	406	353	10.4	9.1
Calhoun	2,173	2,155	15.4	15.5	1,229	1,216	8.7	8.7
Cass	694	773	15.3	16.9	383	425	8.4	9.3
Charlevoix	324	353	16.7	18.0	165	166	8.5	8.5
Cheboygan	336	290	17.0	14.3	204	234	10.3	11.5
Chippewa	428	429	14.0	14.6	279	278	9.1	9.5
Clare	322	323	13.5	13.5	292	266	12.3	11.1
Clinton	867	863	15.8	15.5	313	336	5.7	6.1
Crawford	146	178	16.0	18.9	104	89	11.4	9.5
Delta	592	616	14.7	15.6	403	360	10.0	9.1
Dickinson	347	360	13.3	14.1	283	281	10.8	11.0
Eaton	1,179	1,216	14.4	14.5	501	489	6.1	5.8
Emmet	338	358	15.7	16.2	225	182	10.5	8.2
Genesee	7,313	7,848	16.2	17.4	3,385	3,191	7.5	7.1
Gladwin	224	275	13.3	14.3	186	181	10.2	9.4
Gogebic	253	216	12.9	11.0	286	264	14.6	13.5
Grand Traverse	833	891	17.2	17.7	426	414	8.8	8.2
Gratiot	673	690	17.1	17.4	353	359	9.0	9.0
Hillsdale	641	671	15.6	16.7	373	340	9.1	8.5
Houghton	502	492	13.5	13.6	464	454	12.4	12.6
Huron	568	575	15.9	16.1	420	378	11.7	10.6
Ingham	4,369	4,626	16.1	17.1	1,588	1,613	5.9	6.0
Ionia	805	905	16.2	18.2	423	436	8.5	8.8
Iosco	564	575	18.5	19.1	262	278	8.6	9.2
Iron	186	192	12.7	13.1	191	180	13.0	12.2
Isabella	717	748	13.8	14.4	290	306	5.6	5.9
Jackson	2,197	2,177	14.6	14.6	1,209	1,195	8.0	8.0
Kalamazoo	2,916	3,080	14.0	14.8	1,385	1,361	6.7	6.5
Kalkaska	199	215	17.5	17.6	94	90	8.2	7.4
Kent	7,319	8,132	16.8	18.4	3,530	3,434	8.1	7.8
Keweenaw	36	26	16.4	11.3	29	28	13.2	12.2
Lake	118	111	16.9	15.4	110	110	15.7	15.3

TABLE III-17. LIVE BIRTHS AND DEATHS, AND RATES, AMONG MICHIGAN RESIDENTS, BY COUNTY: 1978 AND 1979 (cont.)

	Live births				Deaths			
	Number		Rate[a]		Number		Rate[a]	
County	1978	1979	1978	1979	1978	1979	1978	1979
Lapeer	1,104	1,170	16.5	16.9	435	450	6.5	6.5
Leelanau	195	197	14.6	14.0	127	114	9.5	8.1
Lenawee	1,459	1,476	16.7	17.0	701	701	8.0	8.1
Livingston	1,361	1,463	14.7	14.7	518	541	5.6	5.5
Luce	98	97	13.4	13.9	70	60	9.6	8.6
Mackinac	138	149	12.3	13.8	130	107	11.6	9.9
Macomb	9,299	9,374	13.4	13.3	4,344	4,407	6.3	6.2
Manistee	302	280	13.4	12.7	245	246	10.9	11.2
Marquette	1,469	1,443	19.9	19.1	548	510	7.4	6.7
Mason	363	391	14.7	15.7	253	235	10.2	9.4
Mecosta	442	492	12.7	14.1	218	251	6.3	7.2
Menominee	437	395	16.5	14.5	288	236	10.9	8.6
Midland	1,090	1,186	15.6	16.7	455	407	6.5	5.7
Missaukee	189	175	19.5	17.5	104	98	10.7	9.8
Monroe	1,878	2,054	14.2	15.6	869	930	6.6	7.1
Montcalm	794	805	17.5	17.5	463	461	10.2	10.1
Muskegon	2,518	2,604	15.9	16.4	1,315	1,337	8.3	8.4
Newaygo	545	522	16.3	15.5	333	300	10.0	8.9
Oakland	13,637	14,174	13.5	13.9	6,815	6,879	6.8	6.7
Oceana	381	356	18.1	16.9	224	209	10.7	9.9
Ogemaw	225	249	13.4	15.4	212	205	12.6	12.7
Ontonagon	125	125	11.7	12.5	115	117	10.7	11.7
Osceola	279	329	15.3	18.2	179	214	9.8	11.8
Oscoda	98	105	14.6	14.6	79	84	11.8	11.7
Otsego	260	274	18.2	18.1	114	142	8.0	9.4
Ottawa	2,564	2,711	17.2	17.5	972	869	6.5	5.6
Presque Isle	211	217	15.0	15.3	135	134	9.6	9.4
Roscommon	182	220	11.2	13.6	183	200	11.3	12.3
Saginaw	3,700	3,941	16.2	17.4	1,687	1,643	7.4	7.2
St. Clair	2,071	2,059	15.5	15.3	1,191	1,213	8.9	9.0
St. Joseph	923	907	17.8	17.4	461	474	8.9	9.1
Sanilac	617	624	15.3	15.7	387	398	9.6	10.0
Schoolcraft	135	130	14.5	14.9	104	106	11.2	12.2
Shiawassee	1,143	1,289	16.3	18.2	459	507	6.5	7.2
Tuscola	916	950	16.6	17.1	429	404	7.8	7.3
Van Buren	1,036	1,172	16.6	18.8	588	537	9.4	8.6
Washtenaw	3,658	3,876	14.4	15.3	1,298	1,288	5.1	5.1
Wayne	35,677	36,609	14.9	15.5	23,234	22,472	9.7	9.5
Wexford	339	425	14.9	18.9	225	257	9.9	11.4
Not stated	6	21			22	20		
TOTAL	138,802	144,452	15.1	15.7	74,773	73,480	8.1	8.0

SOURCE: Michigan Department of Public Health, Michigan Vital Statistics by County, 1978 and 1979 special release (1979 data).

a. Rate per 1,000 population.

TABLE III-18. MARRIAGES AND DIVORCES TAKING PLACE IN MICHIGAN AND THE UNITED STATES: 1945-1980

Year	Michigan		United States	
	Marriages	Divorces	Marriages	Divorces
1945	48,329	21,133	1,612,992	485,000
1946	78,808	29,158	2,291,045	610,000
1947	71,319	21,386	1,991,878	483,000
1948	61,986	16,017	1,811,155	408,000
1949	53,109	16,274	1,579,798	397,000
1950	58,180	15,979	1,667,231	385,144
1951	53,411	15,446	1,594,694	381,000
1952	50,487	14,925	1,539,318	392,000
1953	53,308	16,537	1,546,000	390,000
1954	51,243	16,281	1,490,000	379,000
1955	55,698	17,676	1,531,000	377,000
1956	57,068	16,228	1,585,000	382,000
1957	55,121	15,442	1,518,000	381,000
1958	55,159	14,040	1,451,000	368,000
1959	58,826	16,168	1,494,000	395,000
1960	61,090	16,656	1,523,000	393,000
1961	63,320	16,219	1,548,000	414,000
1962	65,002	17,500	1,577,000	413,000
1963	68,160	17,479	1,654,000	428,000
1964	73,911	19,400	1,725,000	450,000
1965	81,247	20,305	1,800,000	479,000
1966	83,903	21,727	1,857,000	499,000
1967	84,363	23,620	1,927,000	523,000
1968	90,984	25,400	2,069,000	584,000
1969	93,392	28,347	2,145,000	639,000
1970	91,933	29,934	2,158,802	708,000
1971	92,134	31,790	2,190,481	773,000
1972	94,447	35,505	2,282,154	845,000
1973	94,486	37,121[a]	2,284,108	915,000
1974	88,023	39,940[a]	2,229,667	977,000
1975	82,856	40,782	2,152,662	1,036,000
1976	82,753	43,101	2,154,807	1,083,000
1977	86,088	43,036	2,178,367	1,091,000
1978	88,333	45,029	2,282,272	1,130,000
1979	89,450	44,242	2,359,000[p]	1,181,000
1980	86,713[p]	43,637[p]	2,413,000[p]	1,182,000[p]

SOURCES: Michigan Department of Public Health, Michigan Health Statistics, 1978 (Lansing: 1981), Table 4.1 (pre-1979 Michigan data), and special release (1979 and 1980 Michigan data); National Center for Health Statistics, Vital Statistics of the United States, 1972, vol. 3, Marriage and Divorce (Rockville, Md.: 1975), Tables 1.5 and 2.2 (pre-1958 U.S. data); and National Center for Health Statistics, Monthly Vital Statistics Report, vol. 28, no. 13, vol. 29, no. 12, and vol. 30, no. 2 (1958-1980 U.S. data).

a. estimate.

p.: provisional.

TABLE III-19. MARRIAGE AND DIVORCE RATES IN MICHIGAN AND THE UNITED STATES: 1945-1980

Year	Michigan		United States	
	Marriages	Divorces	Marriages	Divorces
1945	8.6	3.9	12.2	3.5
1946	13.8	5.1	16.4	4.3
1947	11.8	3.6	13.9	3.4
1948	10.0	2.6	12.4	2.8
1949	8.4	2.6	10.6	2.7
1950	9.2	2.5	11.1	2.6
1951	8.2	2.4	10.4	2.5
1952	7.6	2.2	9.9	2.5
1953	7.8	2.4	9.8	2.5
1954	7.3	2.3	9.2	2.4
1955	7.7	2.5	9.3	2.3
1956	7.6	2.2	9.5	2.3
1957	7.1	2.0	8.9	2.2
1958	7.0	1.8	8.4	2.1
1959	7.4	2.1	8.5	2.2
1960	7.8	2.2	8.5	2.2
1961	8.0	2.1	8.5	2.3
1962	8.2	2.2	8.5	2.2
1963	8.5	2.2	8.8	2.3
1964	9.1	2.4	9.0	2.4
1965	9.9	2.5	9.3	2.5
1966	10.1	2.6	9.5	2.5
1967	9.8	3.0	9.7	2.6
1968	10.5	3.0	10.4	2.9
1969	10.7	3.3	10.6	3.2
1970	10.4	3.4	10.6	3.5
1971	10.3	3.5	10.6	3.7
1972	10.5	3.9	11.0	4.1
1973	10.5	4.1[a]	10.9	4.4
1974	9.7	4.4[a]	10.5	4.6
1975	9.1	4.5	10.1	4.9
1976	9.1	4.7	10.0	5.0
1977	9.4	4.7	10.1	5.0
1978	9.6	4.9	10.5	5.2
1979	9.7	4.8	10.7[p]	5.4
1980	9.4[p]	4.7[p]	10.9[p]	5.3[p]

SOURCE: Adapted from Michigan Department of Public Health, Michigan Health Statistics, 1978 (Lansing: 1981), Table 4.2 (pre-1979 Michigan data), and special release (1979 and 1980 Michigan data); National Center for Health Statistics, Vital Statistics of the United States, 1972, vol. 3, Marriage and Divorce (Rockville, Md: 1975), Tables 1.5 and 2.2 (pre-1958 U.S. data); and National Center for Health Statistics, Monthly Vital Statistics Report, vol. 28, no. 13, vol. 29, no. 12, and vol. 30, no. 2 (1958-1980 U.S. data).

a. estimate.

p. provisional.

TABLE III-20. MARRIAGES IN MICHIGAN, BY ORDER OF MARRIAGE AND AGE OF BRIDE AND GROOM: 1979

Age	Bride, order of marriage						Groom, order of marriage					
	First	Second	Third	Fourth or more	Not stated	Total	First	Second	Third	Fourth or more	Not stated	Total
Under 15	20	0	0	0	1	21	0	0	0	0	0	0
15	153	0	0	0	4	157	5	0	0	0	0	5
16	1,480	3	0	0	0	1,483	58	0	0	0	0	58
17	2,851	17	0	0	3	2,871	343	0	0	0	5	348
18	7,073	65	1	0	2	7,141	2,781	6	0	0	2	2,789
19	7,954	153	6	0	1	8,114	4,719	19	0	0	3	4,741
20-24	31,260	3,876	200	10	3	35,349	32,508	1,992	47	1	3	34,544
25-29	8,059	6,274	745	85	2	15,165	13,924	5,725	485	31	0	20,165
30-34	1,595	4,434	1,013	192	2	7,254	3,360	5,357	1,048	140	3	9,908
35-39	402	2,504	846	218	0	3,970	837	3,362	962	199	1	5,361
40-44	166	1,522	627	177	1	2,493	332	2,136	769	220	2	3,459
45-49	110	999	398	136	1	1,654	160	1,456	531	155	1	2,303
50-54	50	764	274	102	0	1,190	133	1,167	458	146	0	1,904
55-59	50	527	183	78	0	838	96	825	299	111	1	1,332
60-64	31	471	168	46	1	717	51	636	213	69	1	970
65-69	15	383	146	28	0	572	28	459	144	47	0	678
70-74	7	195	77	27	0	306	23	296	97	36	0	452
75 and over	3	91	45	14	0	153	4	289	110	27	0	430
Not stated	2	0	0	0	0	2	1	2	0	0	0	3
TOTAL	61,281	22,278	4,747	1,123	21	89,450	59,356	23,727	5,163	1,182	22	89,450

SOURCE: Michigan Department of Public Health, special release.

TABLE III-16. REPORTED CASES OF CERTAIN COMMUNICABLE DISEASES IN MICHIGAN, SELECTED PERIODS: 1930-1980

Disease	Annual average				Annual total			
	1930-1939	1940-1949	1950-1959	1960-1969	1977	1978	1979	1980
Diphtheria	1,121	245	66	2	0	0	0	1
Scarlet fever[a]	15,860	7,553	6,745	11,656	31,047	29,759	30,182	24,808
Smallpox	445	26	0	0	0	0	0	0
Typhoid fever	373	85	31	9	13	15	14	12
Whooping cough	11,815	8,676	3,464	884	73	47	102	38
Measles	28,467	29,939	28,907	21,569	1,392	8,006	869	250
Infectious hepatitis[b] (includes serum & unsp. hepatitis)	0	44	748	2,798	2,686	2,174	2,036	1,799
Tuberculosis[c] (all forms)	5,897	5,967	5,559	3,181	1,290	1,260	1,052	1,168
Meningococcal infections[d]	190	257	164	127	51	87	79	77
Poliomyelitus	393	844	1,593	18	0	1	0	1
Syphilis	10,670	13,726	5,495	4,824	1,185	1,133	1,260	1,163
Gonorrhea	6,931	10,176	8,858	13,612	36,794	36,647	36,624	34,951
Chancroid	180	277	106	99	61	49	59	50

SOURCE: Michigan Department of Public Health, Michigan Health Statistics, 1978 (Lansing: 1981), Table 4.5, and special release (1979-1980 data).

a. Streptococcal sore throat including scarlet fever.

b. No cases tabulated prior to 1945. Figure shown for the period 1940-1949 is average of 1945-1949.

c. Effective January 1975, a new diagnostic classification system for tuberculosis was adopted. As a result, case counts and rates prior to 1975 are not directly comparable to the figures in 1975 and later years.

d. Prior to 1952 data were for meningococcic meningitis.

TABLE III-21. BOOK CENSUS OF PATIENTS IN STATE REGIONAL PSYCHIATRIC HOSPITALS, FISCAL YEAR ENDED 30 SEPTEMBER: 1980

		Book census, 30 September 1980		
Name of institution	Location	Residents[a]	Nonresidents[b]	Total
Caro Regional Mental Health Center	Caro	10	7	17
Clinton Valley Center	Pontiac	731	233	964
Detroit Psychiatric Institute	Detroit	138	61	199
Hawthorne Center	Northville	136	169	305
Kalamazoo Regional Psychiatric Center	Kalamazoo	780	204	984
Lafayette Clinic	Detroit	115	53	168
Michigan Institute for Mental Health	Dimondale	61	55	116
Newberry Regional Mental Health Center	Newberry	156	5	161
Northville Regional Psychiatric Hospital	Northville	745	67	812
Walter P. Reuther Psychiatric Hospital	Westland	216	116	217
Traverse City Regional Psychiatric Hospital	Traverse City	403	116	519
Ypsilanti Regional Psychiatric Hospital	Ypsilanti	878	91	969
Center for Forensic Psychiatry	Ann Arbor	158	4	162
TOTAL		4,527	1,066	5,593

SOURCE: Michigan Department of Mental Health, special release.

NOTE: Facilities for mentally ill.
a. In house and on authorized or unauthorized leave.
b. Community living facilities, foster family care, and convalescent status.

TABLE III-22. BOOK CENSUS OF PATIENTS IN CENTERS FOR DEVELOPMENTAL DISABILITIES, FISCAL YEAR ENDED 30 SEPTEMBER: 1980

Name of institution	Location	Book census, 30 September 1980		
		Residents[a]	Nonresidents[b]	Total
Alpine Regional Center for Developmental Disabilities	Gaylord	181	261	442
Caro Regional Mental Health Center	Caro	612	75	687
Coldwater Regional Center for Developmental Disabilities	Coldwater	606	313	919
Hillcrest Regional Center for Developmental Disabilities	Howell	355	251	606
Macomb-Oakland Regional Center	Mt. Clemens	194	817	1,011
Mt. Pleasant Regional Center for Developmental Disabilities	Mt. Pleasant	485	243	728
Muskegon Regional Center for Developmental Disabilities	Muskegon	405	130	535
Newberry Regional Mental Health Center	Newberry	253	27	280
Northville Residential Training Center	Northville	144	50	194
Oakdale Regional Center for Developmental Disabilities	Lapeer	825	228	1,053
Plymouth Center for Human Development	Northville	468	677	1,145
Southgate Regional Center for Developmental Disabilities	Southgate	170	201	371
TOTAL		4,698	3,273	7,971

SOURCE: Michigan Department of Mental Health, special release.
NOTE: Facilities for mentally retarded.
a. In house and on authorized or unauthorized leave.
b. Community living facilities, foster family care, and convalescent status.

TABLE III-23. UTILIZATION OF COMMUNITY HOSPITALS IN MICHIGAN: 1967-1979

Year	Hospitals[a]	Beds	Admissions	Occupancy (percent)	Average daily census
1967	199	32,063	1,104,893	80.6	25,848
1968	198	32,426	1,099,034	81.2	26,339
1969	200	32,302	1,138,246	81.5	26,743
1970	197	33,136	1,149,799	80.4	26,625
1971	199	33,851	1,174,859	79.5	26,928
1972	201	35,464	1,229,295	79.5	28,186
1973	202	36,447	1,266,177	79.5	28,962
1974	211	38,120	1,354,383	79.9	30,447
1975	210	39,089	1,383,654	79.4	31,021
1976	210	39,695	1,394,464	77.5	30,755
1977	212	40,146	1,426,706	76.7	30,812
1978	207	40,097	1,417,078	76.4	30,639
1979	239	50,255	1,492,926	78.4	39,420

SOURCES: American Hospital Association, Hospital Statistics 1972 through 1980 (Chicago: annually), Table 6 (1979); and American Hospital Association, Hospitals, Journal of the American Hospital Association, Guide Issue, 1966 through 1971 (Chicago: annually).

[a] Hospitals accepted for registration by the American Hospital Association; excludes hospital units of institutions.

TABLE III-24. UTILIZATION OF COMMUNITY HOSPITALS IN MICHIGAN, BY STANDARD METROPOLITAN STATISTICAL AREA AND OUTSIDE STANDARD METROPOLITAN STATISTICAL AREAS: 1979

Area	Hospitals[a]	Beds	Admissions	Occupancy (percent)	Average daily census
Nonmetro	79	7,380	249,074	69.5	6,090
Metro	126	32,673	1,183,850	78.7	29,929
Ann Arbor	5	1,857	60,805	77.5	1,685
Battle Creek	8	987	33,779	66.8	784
Bay City	2	550	22,034	72.2	446
Detroit	66	18,674	672,258	81.3	17,634
Flint	8	2,477	96,171	78.8	2,239
Grand Rapids	9	2,532	88,239	78.7	2,350
Jackson	2	561	22,835	71.5	416
Kalamazoo-Portage	5	1,189	42,229	74.6	1,052
Lansing-East Lansing	10	1,560	61,929	73.7	1,357
Muskegon-Muskegon Hgts.-Norton Shores	6	847	27,928	73.4	737
Saginaw	4	1,201	45,164	73.9	996
Toledo	1	238	10,479	65.1	188
TOTAL	205	40,053	1,432,924	77.0	36,019

SOURCE: American Hospital Association, Hospital Statistics, 1979 (Chicago: 1980), Table 6.

[a] Hospitals accepted for registration by the American Hospital Association; excludes hospital units of institutions.

TABLE III-25. HEALTH INSURANCE PREMIUMS IN MICHIGAN AND THE UNITED STATES: 1963-1979

(In millions of dollars)

Year	Insurance companies		Blue Cross, Blue Shield, and other hospital medical plans		Total	
	Michigan	United States	Michigan	United States	Michigan	United States
1963	296	6,145	301	3,918	598	10,063
1964	326	6,769	334	4,332	660	11,101
1965	360	7,352	360	4,777	720	12,129
1966	378	7,796	388	4,969	766	12,765
1967	402	8,295	410	5,247	812	13,542
1968	427	9,082	465	5,966	893	15,048
1969	477	10,197	580	7,089	1,057	17,286
1970	558	11,546	706	8,439	1,265	19,985
1971	619	12,777	867	10,058	1,487	22,835
1972	673	14,771	994	11,465	1,667	26,236
1973	761	16,104	1,119	12,908	1,880	29,012
1974	821	17,915	1,209	14,523	2,030	32,448
1975	899	21,223	1,301	16,943	2,200	38,176
1976	925	24,502	1,577	19,955	2,502	44,457
1977	1,117	28,676	1,924	23,187	3,041	51,863
1978[a]	--	--	--	--	--	--
1979	1,387	35,813	2,348	30,300	3,735	66,113

SOURCE: Health Insurance Institute, Source Book of Health Insurance Data, 1963-64 through 1980-1981 (New York, N.Y.: annually), p. 30.
NOTE: The data refer to insurance company written premiums and earned subscription income of Blue Cross, Blue Shield, and other hospital-medical plans. "Insurance companies" includes premiums for loss of income protection.
a. Data not available.

TABLE III-26. HEALTH INSURANCE BENEFIT PAYMENTS IN MICHIGAN AND THE UNITED STATES: 1963-1979

(In millions of dollars)

Year	Insurance companies		Blue Cross, Blue Shield, and other hospital medical plans		Total	
	Michigan	United States	Michigan	United States	Michigan	United States
1963	215	4,152	279	3,649	495	7,801
1964	244	5,658	305	4,039	550	8,697
1965	273	5,160	335	4,464	608	9,624
1966	295	5,559	365	4,600	661	10,159
1967	320	6,029	403	5,080	723	11,109
1968	338	6,717	446	5,521	785	12,233
1969	389	7,575	505	6,692	895	14,267
1970	474	9,089	699	8,088	1,173	17,177
1971	487	9,497	770	9,372	1,257	18,869
1972	543	10,622	900	10,412	1,444	21,034
1973	582	11,863	999	11,687	1,581	23,550
1974	645	13,636	1,090	13,658	1,735	27,294
1975	723	15,149	1,378	16,575	2,101	31,724
1976	750	20,217	1,519	18,747	2,269	38,964
1977	845	22,113	1,727	20,974	2,572	43,087
1978[a]	--	--	--	--	--	--
1979	1,119	29,562	2,221	27,697	3,340	57,259

SOURCE: Health Insurance Institute, Source Book of Health Insurance Data, 1963-64 through 1980-81 (New York, N.Y.: annually), p. 24.
NOTE: "Insurance companies" includes loss of income benefit payments.
a. Data not available.

TABLE III-27. NUMBER OF PERSONS UNDER AGE 65 COVERED BY HOSPITAL, SURGICAL, AND REGULAR MEDICAL EXPENSE COVERAGE IN MICHIGAN AND THE UNITED STATES, BY TYPE: 31 DECEMBER 1966-1979

(In thousands of persons)

	Hospital expense		Surgical expense		Regular medical expense		Major medical expense[a]	
Year	Michigan	United States	Michigan	United States	Michigan	United States	Michigan	United States
1966	7,242	148,589	6,725	137,448	5,967	110,754	--	55,475
1967	7,521	153,768	7,060	142,828	6,529	116,665	--	60,588
1968	7,897	159,335	7,444	147,252	6,822	122,054	--	65,040
1969	8,226	164,383	7,868	153,304	7,453	127,227	--	70,410
1970	8,226	164,210	7,868	153,352	7,453	132,349	--	76,164
1971	7,842	167,588	7,370	154,923	6,945	133,065	--	76,551
1972	8,017	167,019	7,560	155,173	6,899	139,704	2,634	78,154
1973	7,733	156,595	7,446	149,409	7,117	137,896	2,809	86,223
1974	8,017	161,600	7,979	156,800	7,981	149,300	3,082	89,300
1975	8,069	165,400	7,978	158,500	7,835	152,200	3,262	90,100
1976	8,011	164,000	7,798	156,900	7,823	152,900	3,303	91,300
1977	7,993	165,051	7,993	156,050	7,993	149,997	3,592	93,940
1978[b]	--	--	--	--	--	--	--	--
1979	8,105	169,140	8,105	163,427	8,090	154,285	4,549	103,495

SOURCE: Health Insurance Institute, Source Book of Health Insurance Data, 1956-57 through 1980-81 (New York, N.Y.: annually), pp. 16-17.

NOTE: The data refer to the net total of people protected, that is, duplication among persons protected by more than one kind of insuring organization or more than one insurance company policy providing the same type of coverage has been eliminated. Data presented for those employed in Michigan.

a. Michigan data not available prior to 1972.

b. Data not available.

Data pertaining to education levels, taken from the Census of Population, are estimates based on a 20 percent sample of households and persons living in group quarters. Enrollment data from the 1970 Census of Population are estimated from a 15 percent sample. Ratio estimation procedures were employed to derive these statistics.

The Michigan Department of Education's Michigan Educational Statistics and Fact Book on Higher Education are the sources of most data relating to the educational system in this state. The department publishes numerous other items, among them Bulletins 1012 and 1013.

Many statistics about education for states and the nation are published by the U.S. Office of Education. Data indicating federal support for education are compiled by the Community Services Administration, Executive Office of the President. For the state of Michigan, these data appear as part of Table X-14.

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TABLE IV-1. NUMBER OF SCHOOLS IN MICHIGAN, BY SPECIFIED TYPE, SELECTED YEARS: 1958-1977

Type of school	1958	1960	1962	1964	1966	1968	1971	1974	1975	1976	1977
Public schools[a]											
Elementary	4,356	4,035	2,962	3,242	3,370	3,362	2,503	2,907	2,852	2,860	2,865
Secondary	832	893	944	1,176	1,130	1,057	1,359	1,111	1,077	1,100	1,054
Combined[b]						61	43	n.a.	22	21	24
Nonpublic schools[c]											
Elementary	696	699	733	733	763	763	700	n.a.	n.a.	n.a.	531
Secondary	224	240	230	292	253	253	170	n.a.	n.a.	n.a.	89
Institutions of higher educ.											
Publicly controlled	23	24	24	25	29	36	42	42	42	42	42
Privately controlled	35	35	39	42	45	51	48	46	47	47	48
Schools of nursing not affiliated with colleges and universities	21	23	22	21	21	20	20	n.a.	n.a.	n.a.	n.a.

SOURCE: Bureau of the Census, Statistical Abstract of the United States, 1959 through 1979 (Washington, D.C.: annually), Table 209 (1979).

a. Excluding kindergartens. Secondary includes junior high school.

b. Included in secondary prior to 1968.

c. Excluding kindergartens. Secondary includes junior high school and combined elementary-secondary schools.

n.a.: not available.

TABLE IV-2. STUDENT ENROLLMENT, TEACHERS, STUDENT-TEACHER RATIO, AVERAGE TEACHER SALARY, AND NUMBER OF SCHOOL DISTRICTS IN MICHIGAN, PUBLIC SCHOOLS ONLY, SCHOOL YEARS: 1953-1954 THROUGH 1979-1980

School year	Enrollment[a]	Number of teachers[b]	Student-teacher ratio	Average teacher's salary	Number of districts
1953-54	1,253,602	43,957	28.5	$ 4,173	4,246
1954-55	1,315,238	47,040	28.0	4,380	3,855
1955-56	1,384,813	49,663	27.9	4,865	3,495
1956-57	1,451,949	53,171	27.3	5,067	2,854
1957-58	1,581,121	55,794	27.2	5,340	2,499
1958-59	1,574,606	58,251	27.0	5,504	2,301
1959-60	1,624,262	60,394	26.9	5,699	2,149
1960-61	1,676,404	63,271	26.5	5,898	1,989
1961-62	1,733,705	66,02[illegible]	26.3	6,091	1,794
1962-63	1,794,045	68,099	26.3	6,307	1,580
1963-64	1,856,895	69,376	26.8	6,474	1,515
1964-65	1,917,890	72,935	26.3	6,745	1,227
1965-66	1,968,403	76,047	25.9	6,896	993
1966-67	2,033,982	80,637	25.2	7,535	866
1967-68	2,079,704	83,443	24.9	8,238	712
1968-69	2,122,915	87,386	24.3	9,134	648
1969-70	2,164,386	89,049	24.3	10,045	638
1970-71	2,178,746	87,499	24.9	11,034	624
1971-72	2,212,505	89,236	24.8	11,671	608
1972-73	2,193,270	90,499	24.2	12,070	602
1973-74	2,159,966	90,771	23.8	12,852	597
1974-75	2,139,720	88,743	24.1	14,059	590
1975-76	2,127,917	89,847	23.7	15,064	587
1976-77	2,081,936	90,780	22.9	15,426	581
1977-78	2,023,944	90,312	22.4	16,445	579
1978-79	1,965,685	88,652	22.2	18,016	576
1979-80	1,910,385	87,487	21.8	19,663	575

SOURCE: Michigan Department of Education, Michigan Educational Statistics, 1972 through 1976 (Lansing: annually), Table 13 (1975-1976); Michigan Department of Education, Analysis of Michigan Public School Revenues and Expenditures, 1953 through 1980, Bulletin 1011 (Lansing: annually), p. 5 (1980); and Michigan Department of Education, special release (for number of teachers and ratio, 1952 through 1966).

a. Membership is defined as the number of students enrolled on the fourth Friday after the opening of the school year.

b. Classroom teachers only after 1967-1968.

TABLE IV-3. NUMBER OF TEACHING POSITIONS, AVERAGE TEACHER'S SALARY, AND PUPIL MEMBERSHIP OF PUBLIC SCHOOLS IN MICHIGAN, BY SIZE OF SCHOOL DISTRICT: 1968-1969 AND 1979-1980

Size of district	Number of districts		Teaching position		Average teacher's salary		Pupil membership, September	
	1968-1969	1979-1980	1968-1969	1979-1980	1968-1969	1979-1980	1968-1969	1979-1980
50,000 and over	1	1	11,036	9,726	$ 9,691	$10,960	294,094	224,358
20,000 - 49,999	9	8	11,586	9,691	9,800	21,415	167,470	224,998
10,000 - 19,999	23	19	14,775	11,923	9,618	21,727	344,768	250,110
5,000 - 9,999	59	53	16,965	16,359	9,387	20,449	399,780	361,049
4,500 - 4,999	14	14	2,640	3,083	8,433	20,132	66,105	66,929
4,000 - 4,499	16	16	2,771	3,076	8,959	19,198	67,539	68,148
3,500 - 3,999	19	22	2,864	3,717	8,844	19,582	71,584	81,804
3,000 - 3,499	28	37	3,783	5,467	8,630	19,244	92,296	119,126
2,500 - 2,999	33	35	3,606	4,381	8,523	18,349	90,449	94,997
2,000 - 2,499	53	52	4,718	5,360	8,321	17,709	117,755	115,613
1,500 - 1,999	72	74	5,044	6,043	8,225	17,244	126,611	128,658
1,000 - 1,499	88	80	4,384	4,730	8,139	16,234	108,047	98,361
500 - 999	76	81	2,314	3,084	7,808	15,445	54,209	61,232
Below 500	157	83	1,001	847	7,008	14,482	22,208	15,002
TOTAL	648	575	87,487	87,487	9,134	19,663	2,122,915	1,910,385

SOURCE: Michigan Department of Education, Analysis of Michigan Public School Revenues and Expenditures, 1968-1969 and 1979-1980, Bulletin 1011 (Lansing: annually) p.5 (1979-1980).

TABLE IV-4. PUBLIC AND NONPUBLIC SCHOOL MEMBERSHIP IN MICHIGAN: 1955-1956 THROUGH 1980-1981

School year	Public K-12 membership[a]	Nonpublic K-12 membership[b]	Total membership	Nonpublic school membership as percentage of total membership
1955-56	1,384,813	257,373	1,642,186	15.7
1956-57	1,451,949	272,671	1,724,620	15.8
1957-58	1,518,121	281,967	1,800,088	15.7
1958-59	1,574,606	211,277	1,785,883	11.8
1959-60	1,624,262	298,275	1,922,537	15.5
1960-61	1,676,404	314,770	1,991,174	15.8
1961-62	1,733,705	325,028	2,058,733	15.8
1962-63	1,794,045	340,925	2,134,970	16.0
1963-64	1,856,895	358,765	2,215,660	16.2
1964-65	1,917,890	320,825	2,238,715	14.3
1965-66	1,968,403	361,348	2,329,751	15.5
1966-67	2,033,982	353,444	2,387,426	14.8
1967-68	2,079,704	338,945	2,418,649	14.0
1968-69	2,122,919	323,666	2,446,585	13.2
1969-70	2,164,386	296,309	2,460,695	12.0
1970-71	2,178,746	274,692	2,453,438	11.2
1971-72	2,212,523	223,836	2,436,359	9.2
1972-73	2,193,270	220,284	2,413,554	9.1
1973-74	2,159,966	215,302	2,375,268	9.1
1974-75	2,139,720	210,347	2,350,067	9.0
1975-76	2,127,917	209,466	2,337,383	9.0
1976-77	2,081,936	212,358	2,294,294	9.3
1977-78	2,025,166	209,208	2,234,374	9.4
1978-79	1,966,157	204,059	2,170,216	9.4
1979-80	1,910,437	202,032	2,112,469	9.6
1980-81	1,861,703	206,542	2,068,245	10.0

SOURCE: Michigan Department of Education, Michigan Educational Statistics, 1980-81 (Lansing: 1981), Table 2, and special release.

[a] Fourth Friday following Labor Day membership count; all pupils in membership in grades K-12 on the fourth Friday following Labor Day of each year as defined by rules promulgated by the State Board of Education.

[b] The nonpublic K-12 membership figures are unaudited and may include incomplete data.

TABLE IV-5. ENROLLMENT BY GRADES IN MICHIGAN PUBLIC SCHOOLS, AT CLOSE OF SCHOOL YEAR, BY SELECTED YEARS: 1935-1970, AND ON THE FOURTH FRIDAY FOLLOWING LABOR DAY: 1974-1981

Grade	1935-36	1940-41	1945-46	1950-51	1955-56	1960-61	1969-70
K	63,906	69,881	80,960	98,973	146,843	176,441	180,938
1	86,906	77,964	92,982	111,999	141,568	157,219	172,142
2	82,808	74,723	81,199	102,370	135,634	144,642	165,576
3	82,025	75,784	77,698	89,618	114,002	138,874	165,876
4	82,353	77,304	75,016	83,318	96,926	128,975	163,005
5	82,591	77,134	70,828	79,666	96,111	126,077	161,168
6	84,718	78,628	76,102	68,868	79,012	102,493	165,365
7	77,674	77,689	70,637	74,793	98,745	127,169	166,511
8	76,833	76,619	69,870	70,547	86,177	107,113	161,261
9	66,577	74,305	68,237	68,701	81,519	95,730	164,343
10	54,828	67,563	58,592	59,466	71,078	89,906	160,266
11	45,577	56,347	47,005	50,664	61,119	85,896	142,200
12	39,773	50,407	40,067	46,096	51,393	75,383	126,063
Other[a]	23,388	41,985	33,326	28,363	20,848	20,187	69,672
TOTAL	943,867	973,737	935,285	1,043,566	1,304,456	1,597,892	2,164,386

	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
K	155,987	159,981	152,787	136,843	129,592	125,332	122,455
1	147,344	149,484	154,492	149,567	135,997	128,961	123,662
2	146,946	141,795	143,778	148,878	144,113	130,838	123,337
3	146,188	141,906	137,875	139,365	144,565	140,107	126,503
4	151,769	143,911	139,795	135,434	136,680	141,608	136,255
5	159,768	149,672	142,170	137,803	133,776	134,610	139,185
6	162,093	158,018	148,637	141,603	137,098	133,242	133,698
7	166,923	163,788	159,610	149,898	142,851	138,511	133,885
8	170,013	165,012	162,193	157,603	148,293	140,782	135,966
9	175,558	177,307	174,405	171,649	166,411	156,999	149,403
10	173,641	173,314	172,489	166,038	161,592	156,850	146,734
11	158,309	158,655	157,875	155,259	149,912	145,963	142,779
12	141,910	143,365	143,093	139,565	138,931	132,476	130,699
Other[a]	83,271	101,709	92,737	95,661	96,346	104,158	117,142
TOTAL	2,139,720	2,127,917	2,081,936	2,025,166	1,966,157	1,910,437	1,861,703

SOURCE: Michigan Department of Education, Michigan Educational Statistics, 1979-80 (Lansing: 1979), Table 3, and special release (for 1930-1960, 1979-80, and 1980-81 data).

a. Includes students of elementary and secondary ungraded classes; ungraded special needs and postgraduate. Does not include prekindergarteners.

TABLE IV-6. MICHIGAN NONPUBLIC SCHOOL MEMBERSHIP, BY GRADE: 1972-1973 THROUGH 1980-1981

Grade	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
K	5,165	5,842	6,871	8,825	9,937	9,882	10,166	11,288	11,950
1	17,127	16,655	16,089	16,910	18,479	17,704	16,479	16,432	16,749
2	18,074	17,746	16,958	16,571	17,415	18,563	17,745	16,436	16,505
3	20,015	18,461	18,046	17,607	17,720	17,565	18,370	17,765	16,751
4	20,509	20,109	18,268	18,135	17,844	17,317	17,389	18,333	17,909
5	21,301	20,756	19,796	18,823	18,602	18,200	17,345	17,502	18,739
6	21,765	21,017	20,222	19,890	19,227	18,758	18,179	17,559	17,688
7	20,798	20,516	19,984	19,562	19,532	18,530	17,925	17,366	17,093
8	20,366	19,961	19,981	19,247	18,949	18,844	17,442	17,226	16,782
9	14,615	14,603	14,697	14,372	14,460	14,522	14,191	13,706	13,700
10	13,583	13,614	13,795	13,577	13,486	13,571	13,408	13,323	12,896
11	12,825	12,807	12,720	12,966	12,898	12,896	12,206	12,612	12,628
12	12,448	12,188	12,139	12,207	12,302	12,328	12,235	12,031	12,148
Other[a]	1,693	1,027	781	774	655	528	579	453	645
TOTAL	220,284	215,302	210,347	209,466	211,506	209,208	203,659	202,032	206,542
Change from previous year									
Number	-3,552	-4,982	-4,955	-881	2,040	-2,298	-5,549	-1,627	4,510
Percent	-1.6	-2.3	-2.3	-0.4	1.0	-1.1	-2.7	-0.8	2.2

SOURCE: Michigan Department of Education, Michigan Educational Statistics, 1977-78 (Lansing: 1978), Table 3, and special release.

NOTE: Data are unaudited.

a. Does not include prekindergarten students. Includes special education and part-time students.

TABLE IV-7. MICHIGAN NONPUBLIC SCHOOL MEMBERSHIP, BY DENOMINATION: 1980-1981

	Grades K-8	Grades 9-12	Pre-school	Special education	Part-time
Roman Catholic	94,170	35,526	625	229	3
Christian (NUCS)	12,059	5,051	501	72	3
Luth./Mo. Synod	18,071	2,390	1,174	98	3
Luth./Wisc. Synod	3,088	549	6	0	0
Seventh Day Adv.	2,595	1,003	15	1	0
Jewish	932	146	70	0	0
Baptist	4,701	1,770	247	1	2
Christian Science	30	0	3	0	0
Other (priv. endowed)	5,993	1,559	222	39	16
Unaffiliated	2,679	30	1,179	92	17
Mich. Assn. Chr. Sch.	1,846	711	0	0	0
Independent	3,712	2,547	317	8	60
Seventh Day Adv. (Lake Reg. Conf.)	290	90	1	0	0
TOTAL	159,166	51,372	4,360	541	104

SOURCE: Michigan Department of Education, special release.

TABLE IV-8. MICHIGAN PUBLIC AND NONPUBLIC SCHOOL MEMBERSHIP AND TEACHING POSITIONS, BY COUNTY: 1978-1979 AND 1979-1980

County	1978-1979				1979-1980				Nonpublic membership as a percentage of total	
	Public		Nonpublic		Public		Nonpublic			
	Pupils	Teachers	Pupils	Teachers	Pupils	Teachers	Pupils	Teachers	1978-79	1979-80
Alcona	1,319	65	0	0	1,300	70	0	0	0	0
Alger	2,278	112	29	3	2,155	114	23	3	1.3	1.1
Allegan	17,486	829	700	40	16,837	820	734	41	3.8	4.2
Alpena	7,795	302	616	25	7,404	297	670	31	7.3	8.3
Antrim	3,895	201	73	3	3,858	205	59	6	1.8	1.5
Arenac	3,538	154	0	0	2,547	155	0	0	0	0
Baraga	2,129	104	146	7	2,067	98	100	6	6.4	4.6
Barry	8,387	390	84	6	8,249	374	129	6	1.0	1.5
Bay	23,275	925	6,054	244	22,043	933	6,063	250	20.6	21.6
Benzie	2,719	120	0	0	2,633	121	0	0	0	0
Berrien	39,336	1,946	4,535	223	37,731	1,893	4,656	223	10.3	11.0
Branch	7,326	321	422	14	7,039	314	295	14	5.4	4.0
Calhoun	30,414	1,538	1,220	76	29,467	1,480	1,220	74	3.9	4.0
Cass	8,833	435	37	3	8,652	418	36	3	.4	.4
Charlevoix	4,695	226	82	6	4,459	227	95	9	1.7	2.1
Cheboygan	4,282	193	374	18	4,154	193	475	33	8.0	10.3
Chippewa	6,791	340	16	1	6,594	314	22	2	.2	.3
Clare	5,435	260	78	6	5,499	250	63	6	1.4	1.1
Clinton	11,709	507	1,010	38	11,203	507	949	38	7.9	7.8
Crawford	2,128	93	45	4	1,993	92	23	2	2.1	1.1
Delta	9,723	441	602	31	9,423	451	572	32	5.8	5.6
Dickinson	5,323	245	469	24	5,205	241	452	26	8.1	8.0
Eaton	18,722	867	611	37	18,287	855	617	32	3.2	3.3
Emmet	4,877	222	572	27	4,819	227	498	27	10.5	9.4
Genesee	111,402	4,878	6,787	304	107,406	4,789	6,634	301	5.7	5.8

TABLE IV-8. MICHIGAN PUBLIC AND NONPUBLIC SCHOOL MEMBERSHIP AND TEACHING POSITIONS, BY COUNTY: 1978-1979 AND 1979-1980 (cont.)

County	1978-1979				1979-1980				Nonpublic membership as a percentage of total	
	Public		Nonpublic		Public		Nonpublic			
	Pupils	Teachers	Pupils	Teachers	Pupils	Teachers	Pupils	Teachers	1978-79	1979-80
Manistee	4,412	203	749	34	4,268	215	725	35	14.5	14.5
Marquette	14,977	734	566	30	14,515	749	527	25	3.6	3.5
Mason	5,489	269	241	19	5,323	259	255	14	4.2	4.6
Mecosta	6,271	282	368	21	6,259	284	347	20	5.5	5.3
Menominee	5,160	237	465	21	4,985	260	464	21	8.3	8.5
Midland	16,578	749	766	36	16,124	731	767	37	4.4	4.5
Missaukee	2,009	84	358	17	2,000	85	350	17	15.1	14.9
Monroe	29,806	1,270	3,273	167	29,048	1,295	3,218	152	9.9	10.0
Montcalm	13,541	640	618	42	13,244	638	636	41	4.4	4.6
Montmorency	1,233	64	89	4	1,265	64	0	0	6.7	0
Muskegon	35,839	1,722	3,381	163	34,710	1,704	3,155	153	8.6	8.3
Newaygo	8,374	363	430	24	8,129	365	417	24	4.9	4.9
Oakland	214,284	9,907	24,818	1,407	206,424	9,751	24,742	1,421	10.4	10.7
Oceana	4,255	205	88	4	4,112	202	87	4	2.0	2.1
Ogemaw	2,708	126	205	9	2,720	120	215	9	7.0	7.3
Ontonagon	2,605	141	0	0	2,495	129	0	0	0	0
Osceola	5,526	236	117	7	5,350	249	195	12	2.1	3.5
Oscoda	1,360	73	72	5	1,359	71	80	6	5.0	5.6
Otsego	3,740	172	743	31	3,756	170	700	31	16.6	15.7
Ottawa	30,367	1,441	7,133	329	30,000	21	7,127	336	19.0	19.2
Presque Isle	3,017	134	609	31	2,861	129	582	31	16.8	16.9
Roscommon	3,395	153	135	6	3,270	149	117	6	3.8	3.5
Saginaw	51,610	2,415	7,006	312	50,072	2,253	7,370	316	12.0	12.8
St. Clair	31,540	1,467	1,546	82	30,822	1,401	1,389	75	4.7	4.3
St. Joseph	12,938	631	408	26	12,870	641	557	37	3.1	4.1

TABLE IV-8. MICHIGAN PUBLIC AND NONPUBLIC SCHOOL MEMBERSHIP AND TEACHING POSITIONS, BY COUNTY: 1978-1979 AND 1979-1980 (cont.)

	1978-1979				1979-1980				Nonpublic membership as a percentage of total	
	Public		Nonpublic		Public		Nonpublic			
County	Pupils	Teachers	Pupils	Teachers	Pupils	Teachers	Pupils	Teachers	1978-79	1979-80
Sanilac	9,925	468	26	3	9,772	438	29	2	.3	.3
Schoolcraft	1,616	76	240	9	1,597	80	226	11	12.9	12.4
Shiawassee	18,882	817	941	51	18,341	810	1,016	56	4.7	5.2
Tuscola	15,644	700	1,072	41	15,238	689	1,107	43	6.4	6.8
Van Buren	17,462	815	529	33	17,133	811	477	28	2.9	2.7
Washtenaw	44,830	2,163	3,142	195	43,557	2,154	3,150	196	6.5	6.7
Wayne	463,889	19,936	73,957	3,541	451,258	19,792	72,240	3,495	13.8	13.8
Wexford	5,422	233	199	11	5,327	224	204	11	3.5	3.7
TOTAL	1,965,685	88,652	207,982	10,299	1,911,334	86,109	205,821	10,290	9.6	9.7

SOURCE: Michigan Department of Education, *1977-78 Summary of Expenditure Data for Michigan Public Schools, Bulletin 1013* (Lansing: 1979), pp. 1 - 51, *1978-79 Summary of Expenditure Data for Michigan Public Schools, Bulletin 1013* (Lansing: 1980), pp. 1 - 55, *1978-79 Michigan Nonpublic Schools Educational Statistics*, Table IX, pp. 8 - 12, and special release.

TABLE IV-9. MICHIGAN NONPUBLIC SCHOOL HIGH SCHOOL GRADUATES BY DENOMINATION: 1977-1978 AND 1978-1979

	Male		Female		Total	
	1977-78	1978-79	1977-78	1978-79	1977-78	1978-79
Roman Catholic	4,263	4,690	4,849	4,797	9,112	9,487
Christian	631	718	747	729	1,378	1,447
Lutheran/Missouri Synod	183	206	213	200	396	406
Lutheran/Wisconsin Synod	55	48	73	51	128	99
Seventh Day Adventist	124	114	128	145	252	259
Jewish	1	5	30	25	41	30
Baptist	124	127	112	136	236	263
Christian Science	0	0	0	0	0	0
Other	114	114	144	123	158	237
Unaffiliated	2	0	1	0	3	0
Mich. Assn. Chr. Sch.	63	64	97	84	160	148
Independent	309	365	341	330	650	695
Seventh Day Adventist (Lake Region Conf.)	7	6	7	5	14	11
TOTAL	5,876	6,457	6,742	6,625	12,618	13,082

SOURCE: Michigan Department of Education, special release.

TABLE IV-10. PUBLIC VOCATIONAL EDUCATION ENROLLMENTS IN MICHIGAN, BY PROGRAM TYPE AND LEVEL: 1977-1978 THROUGH 1979-1980

Program type and level	1977-1978	1978-1979	1979-1980
Agriculture			
Secondary	14,406	14,414	13,329
Postsecondary[a]	754	469	533
Adult	387	n.a.	n.a.
Total	15,547	n.a.	n.a.
Distributive education			
Secondary	20,131	21,026	20,503
Postsecondary[a]	9,535	7,752	6,706
Adult	896	n.a.	n.a.
Total	30,562	n.a.	n.a.
Health			
Secondary	8,164	8,728	8,442
Postsecondary[a]	13,793	12,730	21,026
Adult[b]	4,091	n.a.	n.a.
Total	26,048	n.a.	n.a.
Home Economics			
Consumer and homemaking			
Secondary	91,295	83,915	91,681
Postsecondary[a]	0	0	0
Adult	4,510	n.a.	n.a.
Total	95,805	n.a.	n.a.
Wage earning			
Secondary	13,523	11,959	12,425
Postsecondary[a]	0	0	0
Adult	808	n.a.	n.a.
Total	14,331	n.a.	n.a.
Office education			
Secondary	24,335	24,129	21,288
Postsecondary[a]	32,538	32,213	30,679
Adult	13,394	n.a.	n.a.
Total	70,267	n.a.	n.a.
Technical education			
Secondary	0	0	0
Postsecondary[a]	25,694	22,644	21,433
Adult[b]	117	n.a.	n.a.
Total	25,811	n.a.	n.a.
Trade and industrial education			
Secondary	48,471	51,092	49,919
Postsecondary[a]	14,617	13,277	25,629
Adult[b]	38,172	n.a.	n.a.
Total	101,260	n.a.	n.a.
TOTAL	379,631	n.a.	n.a.

SOURCE: Michigan Department of Education, Michigan Educational Statistics, 1977-78 (Lansing: 1978), Table 28, and special release.

NOTE: These statistics cover only enrollment in public institutions. The Michigan Department of Education, the Michigan Department of Licensing and Regulation, and other state agencies license private occupational training schools which are not included here.

a. Postsecondary enrollment includes both full-time and part-time students.

b. Includes apprenticeship students.

TABLE IV-11. ADULT EDUCATION PROGRAMS IN MICHIGAN: 1971-1972 THROUGH 1980-1981

School year	Participants in Adult Basic Education Programs (Grades 1-8)[a]	Participants in Adult Secondary Education Programs (Grades 9-12)[b]	Persons Who Received GED Certificates[c]
1971-72	19,851	15,767	7,784
1972-73	27,159	15,831	8,623
1973-74	43,259	6,180	10,350
1974-75	46,416	8,400	10,000
1975-76	39,815	41,594	10,937
1976-77	31,199	81,690	8,300
1977-78	36,520	70,872	9,848
1978-79	38,369	66,312	12,858
1979-80	40,719	71,764	15,101
1980-81	50,744	86,490	n.a.

SOURCE: Adult Extended Learning Services, Michigan Department of Education.

a. Reports of the school districts recieving federal funds under Adult Education Act, as Amended (Public Law 91-230).

b. As reported for State School Aid.

c. Persons who received General Educational Development (GED) certificates from the Michigan Department of Education. In addition some Michigan local educational agencies also issue GED certificates. GED is a test battery which when successfully completed, indicates the achievement of high school equivalency. Figures pertain to calendar year 1972 through 1980.

TABLE IV-12. PUBLIC SCHOOL STAFF IN MICHIGAN, 1978-1979 THROUGH 1980-1981

(Full-time equivalent)

Staff category	1978-1979	1979-1980	1980-1981
Instructional staff			
Professional			
Classroom teachers	90,686	89,840	86,619
Other teachers	843	632	490
Attendance personnel	232	257	251
Social workers	767	804	813
Guidance staff	3,063	3,040	2,894
Health personnel	407	447	482
Psychological staff	493	532	543
Speech and audiology	703	912	970
Other pupil services	395	584	703
Consultants	1,167	1,255	1,007
Supervision and direction	833	881	926
Librarians	1,845	1,804	1,740
Other staff services and audio-visual	232	230	378
Nonprofessional			
Teacher aides	11,426	11,839	11,165
Other	1,111	1,040	1,061
Library aides	1,620	1,489	1,420
Secretary-clerical aides	2,772	2,571	2,375
Other aides	1,293	1,131	1,090
Other instructional support	269	297	286
TOTAL	120,157	119,585	115,213
Noninstructional staff			
Professional			
Executive administration	1,588	1,492	1,476
Fiscal service staff	588	560	603
Data processing staff	113	122	109
Principals	3,358	3,270	3,191
Assistant principals	1,442	1,445	1,432
Other professionals	1,056	993	1,028
Nonprofessional			
School food service staff	12,904	12,447	12,694
Transportation staff	12,204	12,316	12,040
Operation and maintenance staff	17,700	17,688	17,400
Data processing staff	251	302	310
Secretary and clerical	9,507	9,841	9,945
Other	2,034	2,019	1,875
TOTAL	62,745	62,495	62,103
GRAND TOTAL	182,902	182,080	177,316

SOURCE: Michigan Department of Education, special release.

TABLE IV-13. NUMBER OF TEACHERS EMPLOYED IN MICHIGAN PUBLIC SCHOOLS, BY ASSIGNMENT CATEGORY: 1976-1977 THROUGH 1979-1980

Category	1976-77	1977-78	1978-79	1979-80
English	7,371	7,214	7,099	6,950
Journalism	360	329	308	311
Speech	493	473	477	480
Reading	2,182	2,288	2,397	14
Language arts	751	861	869	897
Economics	139	134	123	119
Geography	478	455	434	414
History	2,085	2,025	1,978	2,018
Political science	392	381	374	360
Psychology	151	163	170	173
Sociology	179	173	173	153
Anthropology	10	11	12	11
Cultural studies	17	12	11	13
Behavior studies	12	12	11	11
Social science	4,542	4,452	4,389	4,320
Biology	1,186	1,169	1,153	1,133
Chemistry	526	519	524	538
Physics	344	337	325	314
Geology-earth science	164	165	162	172
Astronomy	7	10	10	8
Science	3,864	3,712	3,616	3,535
Mathematics	6,206	6,172	6,145	6,137
French	593	587	571	561
German	239	232	237	226
Latin	82	75	73	81
Russian	6	7	4	5
Spanish	747	744	731	718
Other	21	26	25	27
Italian	1	1	1	1
Polish	--	--	1	--
Hebrew	1	3	3	3
Bilingual French	--	2	5	4
Bilingual Russian	2	2	2	1
Bilingual Spanish	70	125	176	212
Bilingual Italian	--	1	1	1
Bilingual Arabic	5	23	23	37
Bilingual other	9	15	21	26

TABLE IV-13. NUMBER OF TEACHERS EMPLOYED IN MICHIGAN PUBLIC SCHOOLS, BY ASSIGNMENT CATEGORY: 1976-1977 THROUGH 1979-1980 (cont.)

Category	1976-77	1977-78	1978-79	1979-80
Humanities	30	19	24	38
Early childhood education	155	134	158	185
Music education	3,244	3,262	3,280	3,197
Art	2,471	2,464	2,461	2,434
Health	258	264	276	304
Physical education	3,864	3,903	3,878	3,804
Recreation	21	21	20	21
Dance	5	10	8	10
Health and physical education	1,330	1,329	1,340	1,315
Driver and safety education	191	194	202	192
Library science	1,599	1,537	1,500	1,486
Adult education	118	134	277	22
Environmental studies	48	52	48	49
Nursery education	169	157	187	204
Counselor	3,108	3,173	3,146	3,164
Occupational therapy	206	221	275	318
Media specialist	372	410	416	403
Other	1,529	1,682	1,762	1,781
School nurse	282	298	287	294
Fine arts	49	53	47	35
Academic study of religion	2	2	1	1
Philosophy	12	10	9	7
Elementary grades	37,551	36,870	36,345	35,607
Junior high grades	1,916	2,024	2,277	2,274
Special Education				
Mentally handicapped	2,921	3,007	3,079	3,260
Speech correction	1,416	1,444	1,500	1,551
Orthopedically handicapped	279	285	288	287
School social worker	931	942	981	1,009
Emotionally disturbed	1,320	1,456	1,632	1,771
Diagnostician	176	157	144	122
Psychologist	475	532	564	631
Homebound and/or Hospital	176	166	165	164
Consultant-physically impaired	125	127	113	108
Education of the blind	142	155	160	170
Education of the deaf	452	467	471	486
Learning disabled	995	1,296	1,639	1,969
Teaching trainables	549	527	556	506
Consultant for mentally handicapped	217	223	243	291

SOURCE: Michigan Department of Education, special release.

TABLE IV-8. MICHIGAN PUBLIC AND NONPUBLIC SCHOOL MEMBERSHIP AND TEACHING POSITIONS, BY COUNTY: 1978-1979 AND 1979-1980 (cont.)

County	1978-1979				1979-1980				Nonpublic membership as a percentage of total	
	Public		Nonpublic		Public		Nonpublic			
	Pupils	Teachers	Pupils	Teachers	Pupils	Teachers	Pupils	Teachers	1978-79	1979-80
Gladwin	4,025	174	272	13	4,080	177	120	6	6.3	2.9
Gogebic	3,777	196	426	24	3,607	195	392	27	10.1	9.8
Grand Traverse	10,956	473	1,850	128	10,994	471	1,824	134	14.4	14.2
Gratiot	10,417	475	49	3	10,212	466	59	4	.5	.6
Hillsdale	8,652	408	344	24	8,382	399	494	29	3.8	5.6
Houghton	6,592	316	144	9	6,395	319	132	9	2.1	2.0
Huron	7,755	372	796	43	7,462	365	793	41	9.3	9.6
Ingham	59,284	2,727	4,109	211	57,849	2,774	4,103	212	6.5	6.6
Ionia	12,808	581	998	45	12,549	566	1,028	46	7.2	7.6
Iosco	7,922	372	156	7	7,711	354	137	7	1.9	1.7
Iron	2,647	125	0	0	2,521	123	0	0	0	0
Isabella	7,144	350	764	43	6,919	348	774	42	9.7	10.1
Jackson	30,419	1,392	3,687	168	29,670	1,342	3,576	169	10.8	10.8
Kalamazoo	38,352	1,972	3,638	173	37,170	1,917	3,547	189	8.7	8.7
Kalkaska	2,557	116	47	0	2,694	119	0	0	1.8	0
Kent	94,671	4,033	16,982	877	94,399	3,984	16,892	842	15.2	15.2
Keweenaw	34	1	0	0	20	1		0	0	0
Lake	952	58	0	0	890	51	0	0	0	0
Lapeer	15,808	639	477	23	15,846	648	513	33	2.9	3.1
Leelanau	2,143	116	444	30	2,086	116	342	25	17.2	14.1
Lenawee	20,945	960	839	66	20,544	984	787	68	3.9	3.7
Livingston	21,227	921	505	21	21,377	920	671	35	2.3	3.0
Luce	1,708	77	11	1	1,704	83	7	1	.6	.4
Mackinac	2,334	123	0	0	2,243	118	0	0	0	0
Macomb	159,984	7,031	12,592	539	153,782	6,898	12,774	541	7.3	7.7

TABLE IV-14. MICHIGAN NONPUBLIC SCHOOL INSTRUCTIONAL PERSONNEL SUMMARY: 1980-1981

	K-8 instructional personnel				9-12 instructional personnel				Total, K-12	
	Teachers	Administrators	Other	Total	Teachers	Administrators	Other	Total	Teachers	Total staff
Roman Catholic	3,491	327	192	4,010	1,745	101	169	2,015	5,236	6,025
Christian (NUCS)	530	37	14	581	248	16	13	277	678	858
Luth./Mo. Synod	760	41	10	811	113	6	8	127	873	938
Luth./Wisc. Synod	150	1	0	151	37	3	3	43	187	194
Seventh Day Adv.	146	5	8	159	82	7	2	91	228	250
Jewish	55	5	2	62	25	6	1	32	80	94
Baptist	207	26	31	364	123	12	16	151	330	415
Christian Science	4	1	1	6	0	0	0	0	4	6
Other	305	46	43	394	122	14	12	148	427	542
Unaffiliate	185	36	57	278	6	1	0	7	191	285
Mich. Assn. Chr. Schools	62	3	2	67	61	3	0	64	123	131
Independent	308	14	33	355	276	18	12	306	584	661
Seventh Day Adv. (Lake Reg. Conf.)	11	1	0	12	10	1	1	12	21	24
TOTAL	6,214	543	393	7,150	2,848	188	237	3,273	9,072	10,423

SOURCE: Michigan Department of Education, special release.

TABLE IV-15. RANKING OF MICHIGAN COUNTIES ACCORDING TO PUBLIC AND PRIVATE SCHOOL MEMBERSHIP AS A PERCENTAGE OF TOTAL POPULATION: 1979-1980

County	Percentage		County	Percentage	
	1978-79	1979-80		1978-79	1979-80
Osceola	31.0	30.6	Huron	23.8	23.1
Montcalm	31.1	30.1	Ingham	23.4	22.9
Otsego	30.7	29.5	Cheboygan	23.0	22.8
Tuscola	30.2	29.3	Marquette	20.8	22.7
Van Buren	28.8	28.2	Oakland	23.7	22.7
Shiawassee	28.1	27.3	Chippewa	22.2	22.6
Ionia	27.9	27.3	Eaton	23.8	22.5
Iosco	26.8	26.1	Mason	23.0	22.4
Gratiot	26.5	25.9	Jackson	22.8	22.3
St. Joseph	25.8	25.8	Dickinson	22.5	22.1
Grand Traverse	26.1	25.5	Hillsdale	22.0	22.1
Berrien	26.1	25.4	Wayne	22.5	22.1
Newaygo	26.7	25.4	Alger	23.3	22.0
Saginaw	25.8	25.4	Calhoun	22.5	22.0
Arenac	26.0	25.3	Clinton	23.3	21.9
Genesee	26.2	25.3	Gladwin	23.6	21.9
Delta	25.9	25.2	Crawford	23.6	21.4
Kent	25.6	25.2	Schoolcraft	20.4	21.0
Ontonagon	24.8	25.0	Kalkaska	20.2	20.9
Baraga	26.8	24.9	Roscommon	21.9	20.9
Sanilac	25.0	24.6	Mackinac	21.4	20.8
Wexford	24.8	24.6	Gogebic	21.2	20.4
Lenawee	25.0	24.5	Menominee	21.2	20.0
Monroe	25.1	24.5	Oscoda	20.8	20.0
Luce	23.9	24.4	Oceana	20.6	19.9
Alpena	25.3	24.2	Kalamazoo	20.4	19.6
Presque Isle	25.7	24.2	Barry	19.8	19.4
Emmet	25.0	24.1	Cass	19.5	19.0
Ottawa	25.0	24.0	Branch	20.1	18.9
St. Clair	24.7	24.0	Mecosta	19.1	18.9
Benzie	25.7	23.9	Wastenaw	19.1	18.4
Midland	24.8	23.8	Houghton	18.5	18.1
Muskegon	24.7	23.8	Iron	18.1	17.2
Lapeer	24.4	23.6	Leelanau	19.6	17.2
Macomb	24.8	23.6	Ogemaw	18.2	17.1
Manistee	23.2	23.6	Montmorency	17.4	16.4
Antrim	24.3	23.5	Isabella	15.3	14.8
Missaukee	24.4	23.5	Alcona	14.3	14.1
Bay	24.2	23.4	Lake	13.4	12.4
Clare	23.5	23.3	Keweenaw	1.5	.9
Allegan	24.5	23.2			
Charlevoix	24.5	23.2	Michigan	23.7	23.0

SOURCE: Adapted from Michigan Department of Education and Michigan Department of Management and Budget, special release.

TABLE IV-17. CHILDREN AND SCHOOLS PARTICIPATING IN SCHOOL LUNCH PROGRAM IN MICHIGAN: FISCAL YEARS 1960-1979

Year	Number of schools participating[a,b]	Children participating[b]	
		Number (000)	Percentage of total enrollment[c]
1960	1,858	347	18.3
1961	1,941	375	19.1
1962	2,050	410	20.4
1963	2,137	445	21.3
1964	2,187	470	21.5
1965	2,228	513	22.7
1966	2,330	556	23.7
1967	2,458	586	24.6
1968	2,440	560	23.3
1969	2,506	588	23.9
1970	2,545	653	26.4
1971	2,757	692	28.4
1972	2,943	675	27.4
1973	2,840	708	28.7
1974	2,976	756	46.3
1975	3,028	761	46.6
1976	2,768	775	46.2
1977	3,256	830	48.7
1978	n.a.	847	49.8
1979	n.a.	921	50.2

SOURCE: Bureau of the Census, Statistical Abstract of the United States, 1961 through 1990 (Washington, D.C.: annually), Table 217 (1979).

a. Public and private elementary and secondary schools; private schools, estimated.

b. Data are for November of the fiscal years prior to 1964 and for December of the fiscal years 1964-1968.

c. Based upon total enrollment in public schools in the fall of the fiscal year and total enrollment in private schools in the previous school year.

n.a.: not available

TABLE IV-18. EARNED DEGREES CONFERRED BY HIGHER EDUCATIONAL INSTITUTIONS IN MICHIGAN AND THE UNITED STATES, BY SEX AND LEVEL OF DEGREE: 1959-1977

Year	Bachelor's and first professional		Master's and second professional		Doctor's degrees (Ph.D., Ed.D. etc.)	
	Men	Women	Men	Women	Men	Women
			Michigan Publicly controlled			
1967-68	13,071	9,757	6,661	3,606	1,024	133
1968-69	14,883	11,809	6,912	4,180	1,173	178
1969-70	16,789	13,001	6,642	4,556	1,387	183
1970-71	17,855	13,391	7,219	5,089	1,539	238
1971-72	18,262	14,181	7,446	5,194	1,433	261
1972-73	19,238	15,089	7,276	5,218	1,429	306
1973-74	18,764	14,332	7,262	5,592	1,243	328
1974-75	17,721	14,015	7,850	5,920	1,295	311
1975-76	17,762	13,838	8,209	6,636	1,105	373
1976-77	15,888	13,335	8,194	6,818	1,096	361
			Privately controlled			
1967-68	3,735	2,329	498	318	6	0
1968-69	4,099	2,472	442	358	4	0
1969-70	4,312	2,601	485	360	7	0
1970-71	4,432	2,595	590	363	14	2
1971-72	4,481	2,578	601	408	16	0
1972-73	4,402	2,466	620	389	21	2
1973-74	4,727	2,589	591	372	10	1
1974-75	4,540	2,622	660	457	26	3
1975-76	4,982	2,799	666	494	15	5
1976-77	3,934	2,784	591	495	35	12
			Total			
1958-59	10,692	5,797	3,058	1,314	445	53
1959-60	11,149	6,559	3,201	1,364	457	55
1960-61	11,294	6,497	3,195	1,550	552	48
1961-62	11,442	7,116	3,649	1,663	576	67
1962-63	11,854	8,057	3,801	1,758	619	72
1963-64	12,829	9,152	4,003	2,112	707	89
1964-65	13,466	9,638	4,325	2,333	755	88
1965-66	14,003	9,868	5,597	3,010	818	101
1966-67	15,562	10,639	6,318	3,325	921	122
1967-68	16,806	12,086	7,109	3,924	1,030	133
1968-69	18,982	14,281	7,354	4,538	1,177	178
1969-70	21,101	15,602	7,127	4,916	1,394	183
1970-71	22,287	15,986	7,809	5,452	1,553	240
1971-72	22,743	16,759	8,047	5,602	1,449	261
1972-73	23,640	17,545	7,896	5,607	1,450	308
1973-74	23,491	16,921	7,853	5,964	1,253	329
1974-75	22,251	16,637	8,510	6,377	1,321	314
1975-76	22,743	16,637	8,037	6,042	1,538	480
1976-77	19,822	16,119	8,785	7,313	1,131	373

TABLE IV-18. EARNED DEGREES CONFERRED BY HIGHER EDUCATIONAL INSTITUTIONS IN MICHIGAN AND THE UNITED STATES, BY SEX AND LEVEL OF DEGREE: 1959-1977 (cont.)

Year	Bachelor's and first professional		Master's and second professional		Doctor's degrees (Ph.D., Ed.D. etc.)	
	Men	Women	Men	Women	Men	Women
			United States Publicly controlled			
1967-68	232,947	188,456	71,533	41,091	12,575	1,582
1968-69	271,762	209,409	77,751	47,817	14,526	1,929
1969-70	307,514	230,661	79,558	55,793	16,913	2,276
1970-71	328,258	250,428	88,246	64,059	18,064	2,730
1971-72	352,824	270,374	96,468	71,481	18,577	3,205
1972-73	372,890	285,592	99,229	75,991	18,587	3,783
1973-74	383,117	297,812	101,722	83,782	17,897	3,920
1974-75	367,615	296,816	103,509	91,157	17,567	4,612
1975-76	367,854	299,037	105,968	101,241	16,902	4,861
1976-77	336,291	296,242	104,471	104,276	16,119	5,107
			Privately controlled			
1967-68	167,883	103,457	42,216	22,310	7,610	1,324
1968-69	267,869	113,341	44,130	24,716	8,227	1,507
1969-70	179,435	115,712	46,588	27,448	8,979	1,704
1970-71	185,962	119,738	50,344	28,837	9,470	1,849
1971-72	191,828	122,858	53,617	31,208	9,518	2,069
1972-73	195,471	126,754	55,771	33,534	9,988	2,432
1973-74	196,694	131,031	56,622	36,133	9,477	2,532
1974-75	190,039	133,452	58,606	40,379	9,252	2,655
1975-76	193,905	136,700	61,777	44,015	9,371	2,942
1976-77	158,940	132,337	62,418	45,572	8,910	2,987
			Total			
1958-59	254,868	130,283	47,321	22,176	8,371	989
1959-60	255,504	139,385	50,937	23,560	8,801	1,028
1960-61	155,900	145,884	54,158	24,111	9,463	1,112
1961-62	262,015	158,470	58,705	26,184	10,377	1,245
1962-63	274,750	175,842	62,944	28,474	11,448	1,374
1963-64	299,813	202,291	69,012	32,110	12,955	1,535
1964-65	319,670	219,260	76,211	35,984	14,692	1,775
1965-66	331,122	224,491	93,184	47,588	16,121	2,118
1966-67	355,300	239,562	103,179	54,713	18,164	2,457
1967-68	392,830	278,760	113,749	63,401	20,185	2,906
1968-69	446,933	322,750	121,881	72,533	22,753	3,436
1969-70	486,949	346,373	126,146	83,241	25,892	3,980
1970-71	514,220	370,166	138,590	92,896	27,534	4,579
1971-72	544,652	393,232	150,085	102,689	28,095	5,274
1972-73	568,361	412,346	155,000	109,525	28,575	6,215
1973-74	579,811	428,843	158,344	119,915	27,374	6,452
1974-75	557,654	430,268	162,115	131,536	26,819	7,267
1975-76	561,759	435,754	167,745	145,256	26,273	7,803
1976-77	495,231	428,579	166,889	149,848	25,029	8,094

SOURCE: National Center for Education Statistics, Earned Degrees Conferred, 1975-76, Summary Data (Washington, D.C.: 1977), Tables 3, 3A, and 3B, and similar documents for earlier years; and Office of Education, Earned Degrees Conferred by Higher Educational Institutions, 1951-1952 through 1957-1958 (Washington, D.C.: annually), Circulars no. 360a, 380a, 418, 461, 499, 527, and 570 respectively.

TABLE IV-19. OPENING FALL ENROLLMENTS BY TYPE OF MICHIGAN HIGHER EDUCATION INSTITUTIONS (HEADCOUNT): 1960-1981, AND FISCAL-YEAR EQUATED 1974-1979

Year	Public 4-year institutions	Public 2-year institutions	Private institutions	Total
		Headcount		
1960	107,658	27,220	36,398	171,285
1961	112,082	31,619	38,278	181,979
1962	119,834	34,356	39,700	193,890
1963	129,113	38,001	40,611	207,725
1964	143,114	46,123	43,472	232,709
1965	162,312	58,216	47,896	268,424
1966	176,487	69,496	49,462	295,445
1967	187,708	79,698	50,461	317,867
1968	198,419	95,965	50,777	345,161
1969	208,323	115,299	50,759	374,381
1970	217,802	125,553	52,348	395,703
1971	220,165	132,059	51,335	403,559
1972	218,667	137,634	50,658	406,959
1973	221,893	152,715	51,160	425,768
1974	229,627	173,643	55,273	458,543
1975	241,769	197,199	61,081	500,049
1976	236,831	187,622	60,372	484,825
1977	236,618	186,876	60,497	483,991
1978	236,035	187,649	62,810	486,494
1979	240,600	209,554	65,333	514,488
1980	242,907	207,816	66,216	516,939
1981	235,027	211,871	67,509	514,407
		Fiscal-year equated		
1974	200,556	89,861	48,205	338,622
1975	207,611	109,484	53,151	370,246
1976	213,916	111,646	51,354	376,619
1977	207,284	109,043	51,014	367,341
1978	203,895	107,223	50,647	361,765
1979	196,751	111,394	53,177	361,322

SOURCE: Michigan Department of Education, Michigan Educational Statistics, 1977-78 (Lansing: 1978), Table 21 (1976); and special release.

TABLE IV-16. GENERAL FUND REVENUE SOURCES AND CURRENT OPERATING EXPENDITURES FOR PUBLIC SCHOOLS IN MICHIGAN: 1967-1968 THROUGH 1979-1980

	Revenues					Total current operating expenditures ($000)	Per pupil current operating expenditures
School year	Local ($000)	State ($000)	Federal ($000)	Other[a] ($000)	Total[b] ($000)		
1967-68	681,337	554,838	58,852	4,301	1,299,328	1,239,753	$ 596.11
1968-69	818,859	610,972	66,806	4,634	1,501,272	1,391,736	655.58
1969-70	938,595	684,628	63,715	5,005	1,691,943	1,573,119	726.82
1970-71	1,037,042	754,799	81,034	5,534	1,878,408	1,790,120	821.63
1971-72	1,148,771	798,505	102,418	4,824	2,054,519	1,935,035	874.59
1972-73	1,212,837	859,463	112,945	5,096	2,190,342	2,085,335	950.79
1973-74	1,378,727	945,116	116,182	4,977	2,445,002	2,271,936	1,051.86
1974-75	1,544,679	991,396	145,713	5,714	2,687,502	2,548,409	1,191.01
1975-76	1,715,734	1,028,155	161,897	4,644	2,910,430	2,772,531	1,302.94
1976-77	1,614,153	1,193,332	149,280	6,715	2,963,479	2,934,395	1,409.46
1977-78	1,804,754	1,290,231	192,513	5,547	3,293,046	3,286,377	1,623.75
1978-79	1,993,161	1,349,221	215,510	6,433	3,564,326	3,578,392	1,820.43
1979-80	2,273,569	1,377,578	226,782	3,837	3,881,765	3,905,187	2,044.19

SOURCE: Michigan Department of Education, *Analysis of Michigan Public School Revenues and Expenditures*, 1968 through 1979, *Bulletin 1011* (Lansing: annually), pp. 14-15 (1979).

NOTE: General fund is the fund used to record the operations of the school district pertaining to education, except those specifically described under Building and Site and Debt Retirement funds. Current operating expenditures are the basic expenses of a school district including expenditures for instruction, administration, attendance, health, transportation, fixed charges, operation of plant, and maintenance of plant. The current operating expenditures exclude capital outlay, community services, student services, and outgoing transfers.

a. Intermediate sources, gifts, and bequests.

b. Excludes incoming transfers.

TABLE IV-20. OPENING FALL ENROLLMENT (HEADCOUNT) IN INSTITUTIONS OF HIGHER EDUCATION IN MICHIGAN, BY INSTITUTION: 1977-1981

Institution and city	1977	1978	1979	1980	1981
Public baccalaureate institutions					
Central Michigan University, Mt. Pleasant	17,973	17,802	17,779	18,269	17,653
Eastern Michigan University, Ypsilanti	19,104	18,655	18,865	19,323	18,766
Ferris State College, Big Rapids	9,965	10,208	10,596	11,112	11,261
Grand Valley State College, Allendale	7,469	7,065	7,142	6,984	6,699
Lake Superior State College, Sault Ste. Marie	2,261	2,401	2,309	2,501	2,559
Michigan State University, East Lansing	47,383	46,567	47,355	47,316	44,887
Michigan Technological University, Houghton	6,807	7,130	7,690	7,865	7,779
Northern Michigan University, Marquette	8,844	8,995	9,452	9,379	9,073
Oakland University, Rochester	11,051	11,220	11,729	12,006	11,644
Saginaw Valley College, University Center	3,530	3,706	3,818	4,285	4,324
University of Michigan, Ann Arbor	35,954	36,577	36,158	37,171	35,677
University of Michigan, Dearborn	5,480	5,955	6,406	6,291	6,575
University of Michigan, Flint	3,801	3,884	4,122	4,410	4,609
Wayne State University, Detroit	34,500	33,423	34,337	33,408	31,522
Western Michigan University, Kalamazoo	22,496	22,447	22,842	22,641	21,999
TOTAL	236,618	236,035	240,600	242,907	235,027
Public community and junior colleges[a]					
Alpena Community College, Alpena	1,765	1,752	1,695	2,097	1,946
Bay de Noc Community College, Escanaba	1,163	1,192	1,480	1,531	1,621
C.S. Mott Community College, Flint	13,417	9,045	9,754	10,698	10,787
Delta College, University Center	8,802	9,148	9,585	9,996	10,013
Glen Oaks Community College, Centerville	721	1,031	1,224	1,224	1,173
Gogebic Community College, Ironwood	1,066	1,004	1,308	1,130	1,591

TABLE IV-20. OPENING FALL ENROLLMENT (HEADCOUNT) IN INSTITUTIONS OF HIGHER EDUCATION IN MICHIGAN, BY INSTITUTION: 1977-1981 (cont.)

Institution and city	1977	1978	1979	1980	1981
Public community and junior colleges (cont.)					
Grand Rapids Junior College, Grand Rapids	8,121	7,516	14,233[b]	8,871	8,905
Henry Ford Community College, Dearborn	16,953	17,191	17,191[c]	16,231	16,075
Highland Park Community College, Highland Park	2,758	2,233	2,323	2,654	2,706
Jackson Community College, Jackson	5,507	6,506	8,554	7,085	8,751
Kalamazoo Valley Community College, Kalamazoo	5,742	6,490	6,663	7,069	7,477
Kellogg Community College, 1Battle Creek	4,591	4,304	7,368	5,855	5,369
Kirtland Community College, Roscommon	1,058	1,118	1,075	1,075[d]	1,418
Lake Michigan College, Benton Harbor	3,345	3,250	3,301	3,602	3,013
Lansing Community College, Lansing	18,345	18,313	20,129	18,884	19,143
Macomb County Community College, Warren	24,356	25,032	25,619	28,429	28,090
Mid-Michigan Community College, Gladwin	1,303	1,632	1,660	2,007	1,582
Monroe County Community College, Monroe	2,200	2,020	1,994	2,151	2,470
Montcalm Community College, Sidney	1,199	1,333	1,650	1,544	1,223
Muskegon Community College, Muskegon	4,555	5,011	5,353	5,171	5,100
North Central Michigan College, Petoskey	1,502	1,519	1,836	1,881	1,965
Northwestern Michigan College, Traverse City	2,628	2,731	2,971	3,389	3,432
Oakland Community College, Bloomfield Hills	18,825	19,995	20,683	23,554	24,000
St. Clair County Community College, Port Huron	3,258	3,165	3,350	3,634	3,655
Schoolcraft College, Livonia	8,239	9,410	7,904	8,077	8,527
Southwestern Michigan College, Dowagiac	1,737	1,844	2,001	2,135	2,238
Washtenaw Community College, Ann Arbor	7,172	7,465	7,622	8,445	8,343
Wayne County Community College, Detroit	15,636	15,610	20,101	18,386	20,325
West Shore Community College, Scottville	912	789	927	1,011	933
TOTAL	186,876	187,649	209,554	207,816	211,871

TABLE IV-20. OPENING FALL ENROLLMENT (HEADCOUNT) IN INSTITUTIONS OF HIGHER EDUCATION IN MICHIGAN, BY INSTITUTION: 1977-1981 (cont.)

Institution and city	1977	1978	1979	1980	1981
Private institutions					
Adrian College, Adrian	912	824	945	1,116	1,242
Albion College, Albion	1,705	1,784	1,781	1,860	1,876
Allan/Touro College, Southfield	--	--	--	--	20
Alma College, Alma	1,170	1,183	1,201	1,198	1,110
Andrews University, Berrien Springs	2,837	2,924	2,983	3,018	3,083
Aquinas College, Grand Rapids	1,684	1,918	2,163	2,529	2,753
Baker Jr. College of Business, Flint	1,050	1,312	1,171	1,311	1,427
Calvin College, Grand Rapids	4,075	3,977	3,988	4,058	3,919
Calvin Theological Seminary, Grand Rapids	220	210	209	190	185
Center for Creative Studies	983	1,009	1,034	1,086	1,103
Center for Humanistic Studies, Detroit	--	--	--	--	55
Chapin Jr. College of Business, Oxford	--	--	--	--	9
Cleary College, Ypsilanti	461	459	586	765	416
Concordia Lutheran Junior College, Ann Arbor	615	556	552	526	550
Cranbrook Academy of Art, Bloomfield Hills	155	145	158	148	150
Davenport College of Business, Grand Rapids	2,174	2,243	2,570	3,047	4,265
Detroit Bible College, Detroit	335	301	388	375	375[e]
Detroit College of Business, Dearborn	2,065	1,887	2,198	2,368	2,789
Detroit College of Law, Detroit	957	845	816	848	874
Duns Scotus College, Southfield	56	59	35	n.a.	n.a.
General Motors Institute, Flint	2,354	2,248	2,241	2,327	2,389
Grace Bible College, Grand Rapids	159	215	198	176	241
Grand Rapids School of Bible, Grand Rapids	579	570	583	532	n.a.
Great Lakes Bible College, Lansing	200	232	206	182	178
Grand Rapids Baptist, Grand Rapids	1,048	1,137	1,144	1,216	1,132
Hillsdale College, Hillsdale	1,048	989	1,035	1,035	1,043

TABLE IV-20. OPENING FALL ENROLLMENT (HEADCOUNT) IN INSTITUTIONS OF HIGHER EDUCATION IN MICHIGAN, BY INSTITUTION: 1977-1981 (cont.)

Institution and city	1977	1978	1979	1980	1981
Private institutions (cont.)					
Hope College, Holland	2,330	2,371	2,355	2,464	2,458
John Wesley College at Owosso, Owosso	284	221	66	n.a.	n.a.
Jordon College, Cedar Springs	179	281	914	683	654
Kalamazoo College, Kalamazoo	1,534	1,444	1,438	1,452	1,367
Kendall School of Design	n.a.	n.a.	416	482	505
Lawrence Institute of Technology, Southfield	4,714	4,861	4,991	5,260	5,703
Lewis College of Business	164	560	455	487	609
Madonna College, LIvonia	2,521	3,011	3,131	3,213	3,385
Marygrove College, Detroit	811	871	958	1,025	1,149
Mercy College of Detroit, Detroit	2,226	2,272	2,281	2,484	2,119
Merrill-Palmer Institute, Detroit	88	115	97	n.a.	--
Michigan Christian Junior College, Rochester	400	312	262	338	319
Muskegon Business College, Muskegon	1,002	1,017	994	1,125	1,175
Nazareth College, Nazareth	538	620	524	531	528
Northwood Institute, Midland	1,510	1,653	1,789	1,945	1,929
Olivet College, Olivet	708	671	628	668	637
Oxford School of Business, Oxford	--	--	--	--	133[f]
Reformed Bible College, Grand Rapids	213	235	234	209	206
Sacred Heart Seminary, Detroit	164	119	108	142	172
Saint John's Seminary	98	110	141	149	211
St. Mary's College, Orchard Lake	213	196	205	185	216
Shaw College at Detroit, Detroit	1,039	805	603	632	655
Siena Heights College, Adrian	1,070	1,131	1,327	1,420	1,478
Spring Arbor College, Spring Arbor	825	845	1,048	1,086	1,011
Suomi College, Hancock	403	537	440	578	510
Thomas Cooley Law School, Lansing	998	1,046	1,079	1,052	1,045
University of Detroit, Detroit	8,094	7,848	7,025	6,397	6,186
Walsh College of Accountancy and Business Administration, Troy	1,287	1,393	1,583	1,583[d]	1,707
St. Cyril and Methodius Seminary Orchard Lake	--	--	--	--	73

TABLE IV-21. ESTIMATE OF MICHIGAN RESIDENT STUDENT EXPENSES AT MICHIGAN INSTITUTIONS OF HIGHER EDUCATION AS OF 1 APRIL 1981: EXPENSE FOR 1981-1982 ACADEMIC YEAR (SEPTEMBER THROUGH JUNE)

Institution	Tuition and fees	Room and board[a]	Books and personal[b]	Travel[c]	Total
Public colleges and universities					
Central Michigan Univ.					
Mt. Pleasant	$ 1,182	$ 1,998	$ 725	$ 325	$ 4,230
Eastern Michigan Univ.					
Ypsilanti	1,001	2,020	725	325	4,071
Ferris State College					
Big Rapids	1,209	2,067	725	325	4,326
Grand Valley State College					
Allendale	1,200	2,120	725	325	4,370
Lake Superior State College					
Sault Ste. Marie	1,060	2,050	725	325	4,160
Michigan State University					
East Lansing					
Freshman, Sophomore	1,362	1,882	725	325	4,294
Junior, Senior	1,497	1,882	725	325	4,429
Michigan Technological Univ.					
Houghton	1,272	2,072	725	325	4,394
Northern Michigan University					
Marquette	1,203	2,045	725	325	4,298
Oakland Univ., Rochester					
Freshman, Sophomore	1,070	2,135	725	325	4,255
Junior, Senior	1,148	2,135	725	325	4,333
Saginaw Valley State College					
University Center	1,049	1,934	725	325	4,033
Univ. of Michigan, Ann Arbor					
Freshman, Sophomore	1,475	2,262	725	325	4,787
Junior, Senior	1,647	2,262	725	325	4,959
Univ. of Michigan/Dearborn					
Dearborn	1,088	1,450	725	600	3,863
University of Michigan/Flint					
Flint	1,000	1,450	725	600	3,775
Wayne State Univ., Detroit					
Freshman, Sophomore	1,422	1,450	725	600	4,197
Junior, Senior	1,555	1,450	725	600	4,330
Western Michigan University					
Kalamazoo					
Freshman, Sophomore	1,200	2,015	725	325	4,265
Junior, Senior	1,270	2,015	725	325	4,335
Nonpublic colleges and universities					
Adrian College, Adrian	4,686	2,000	725	325	7,736
Albion College, Albion	5,080	2,272	725	325	8,402
Allan/Touro College,					
Southfield	3,205	1,450	725	600	5,980
Alma College, Alma	4,969	2,201	725	325	8,220
Andrews University					
Berrien Springs					
Undergraduate	4,510	2,400	725	325	7,960
Graduate	3,312	2,400	725	325	6,762
Aquinas College,					
Grand Rapids	4,016	2,100	725	325	7,166
Baker Jr. College of Bus.					
Flint	2,100	1,450	725	600	4,875

TABLE IV-21. ESTIMATE OF MICHIGAN RESIDENT STUDENT EXPENSES AT MICHIGAN INSTITUTIONS OF HIGHER EDUCATION AS OF 1 APRIL 1981: EXPENSE FOR 1981-1982 ACADEMIC YEAR (SEPTEMBER THROUGH JUNE) (cont.)

Institution	Tuition and fees	Room and board[a]	Books and personal[b]	Travel[c]	Total
Nonpublic colleges and universities (cont.)					
Calvin College Grand Rapids	$3,480	$1,720	$ 725	$ 325	$6,250
Center for Creative Studies College of Art and Design Detroit	3,900	1,450	725	600	6,675
Chapin Jr. College of Bus. Oxford	1,800	1,450	725	600	4,575
Cleary College, Ypsilanti	2,430	1,450	725	600	5,205
Concordia Coll., Ann Arbor	2,431	1,825	725	325	5,306
Cranbrook Academy of Art Bloomfield Hills	3,646	2,600	725	325	7,296
Davenport College of Bus. Grand Rapids	2,928	1,875	725	325	5,853
D'etre Institute of Arts & Sciences, Grosse Pointe	2,900	1,450	725	600	5,675
Detroit College of Business Dearborn	2,593	1,450	725	600	5,368
Detroit College of Law Detroit					
Day	3,000	1,450	725	600	5,775
Evening	2,250	1,450	725	600	5,025
General Motors Institute Flint	1,344	1,160	580	260	3,344
Grace Bible College Grand Rapids	1,530	1,850	725	325	4,430
Grand Rapids Baptist College Grand Rapids	2,850	1,950	725	325	5,850
Hillsdale Coll., Hillsdale	4,870	2,380	725	325	8,300
Hope College, Holland	4,520	2,080	725	325	7,650
Jordan Coll., Cedar Springs	2,000	1,500	725	325	4,550
Kalamazoo Coll., Kalamazoo	5,529	2,169	725	325	8,748
Kendall School of Design Grand Rapids	3,036	1,450	725	600	5,811
Lawrence Inst. of Technology Southfield					
Undergraduate	1,725	1,450	725	600	4,500
Graduate	1,905	1,450	725	600	4,680
Lewis College of Business Detroit	3,885	2,175	1,088	900	8,048
Madonna College, Livonia	1,748	1,860	725	325	4,658
Marygrove College, Detroit					
Undergraduate	3,423	2,150	725	325	6,623
Graduate	1,935	2,150	725	325	5,135
Mercy College of Detroit Detroit	2,940	1,720	725	325	5,710

TABLE IV-21. ESTIMATE OF MICHIGAN RESIDENT STUDENT EXPENSES AT MICHIGAN INSTITUTIONS OF HIGHER EDUCATION AS OF 1 APRIL 1981: EXPENSE FOR 1981-1982 ACADEMIC YEAR (SEPTEMBER THROUGH JUNE) (cont.)

Institution	Tuition and fees	Room and Board[a]	Books and personal[b]	Travel[c]	Total
Nonpublic colleges and universities (cont.)					
Michigan Christian Jr. College Rochester	$2,300	$1,850	$ 725	$ 325	$5,200
Muskegon Business College Muskegon	2,055	1,450	725	600	4,830
Nazareth College Nazareth	4,240	2,120	725	325	7,410
Northwood Institute, Midland	2,910	1,710	725	325	5,670
Olivet College, Olivet	4,570	2,150	725	325	7,770
Reformed Bible College Association, Detroit	2,180	1,750	725	325	4,980
Sacred Heart Seminary Detroit	2,500	1,200	725	325	4,750
Shaw College of Detroit Detroit	3,060	1,450	725	600	5,835
St. Mary's College Orchard Lake	1,900	1,600	725	325	4,550
Siena Heights College, Adrian					
Undergraduate	2,940	1,900	725	325	5,890
Graduate	2,472	1,900	725	325	5,422
Spring Arbor College Spring Arbor	3,900	1,700	725	325	6,650
Suomi College, Hancock	4,900	2,100	725	325	8,050
Thomas Cooley Law School[d] Lansing	3,015	2,175	1,088	900	7,178
University of Detroit Detroit	4,230	2,208	725	325	7,488
University of Detroit Detroit					
Graduate Programs					
College: Law, day	4,424	2,208	725	325	7,682
College: General graduate	2,610	2,208	725	325	5,868
College: Dentistry	7,370	2,208	725	325	10,628
Walsh College'Act. and Bus. Administration, Detroit					
Undergraduate	1,723	1,450	725	600	4,498
Graduate	1,354	1,450	725	600	4,129
William Tyndale College Detroit	2,194	2,200	725	600	5,719

TABLE IV-21. ESTIMATE OF MICHIGAN RESIDENT STUDENT EXPENSES AT MICHIGAN INSTITUTIONS OF HIGHER EDUCATION AS OF 1 APRIL 1981: EXPENSE FOR 1981-1982 ACADEMIC YEAR (SEPTEMBER THROUGH JUNE) (cont.)

Institution	Tuition and fees	Room and Board[a]	Books and personal[b]	Travel[c]	Total
		Public Community Colleges			
Alpena Comm. College					
Alpena					
Resident of district	$ 605	$1,450	$ 725	$ 600	$3,380
Non-resident of district	915	1,720	725	325	3,685
Bay De Noc Community College					
Escanaba					
Resident of district	635	1,450	725	600	3,410
Non-resident of district	868	1,800	725	325	3,718
Delta College, Univ. Center					
Resident of district	671	1,450	725	600	3,446
Non-resident of district	1,198	1,450	725	600	3,973
C.S. Mott Community College					
Flint					
Resident of district	682	1,450	725	600	3,457
Non-resident of district	868	1,450	725	600	3,643
Glen Oaks Community College					
Centreville					
Resident of district	642	1,450	725	600	3,417
Non-resident of district	890	1,450	725	600	3,665
Gogebic Comm. College					
Ironwood					
Resident of district	526	1,450	725	600	3,301
Non-resident of district	1,022	1,450	725	600	3,797
Grand Rapids Jr. College					
Grand Rapids					
Resident of district	744	1,450	725	600	3,519
Non-resident of district	1,240	1,450	725	600	4,015
Henry Ford Community College					
Dearborn					
Resident of district	578	1,450	725	600	3,353
Non-resident of district	857	1,450	725	600	3,632
Highland Park Comm. College					
Highland Park					
Resident of district	650	1,450	725	600	3,425
Non-resident of district	950	1,450	725	600	3,725
Jackson Comm. Coll., Jackson					
Resident of district	775	1,450	725	600	3,550
Non-resident of district	1,023	1,450	725	600	3,798
Kalamazoo Valley Comm. College					
Kalamazoo					
Resident of district	620	1,450	725	600	3,395
Non-resident of district	1,240	1,450	725	600	4,015
Kellogg Community College					
Battle Creek					
Resident of district	558	1,450	725	600	3,333
Non-resident of district	899	1,450	725	600	3,674

TABLE IV-21. ESTIMATE OF MICHIGAN RESIDENT STUDENT EXPENSES AT MICHIGAN INSTITUTIONS OF HIGHER EDUCATION AS OF 1 APRIL 1981: EXPENSE FOR 1981-1982 ACADEMIC YEAR (SEPTEMBER THROUGH JUNE) (cont.)

Institution	Tuition and fees	Room and Board[a]	Books and personal[b]	Travel[c]	Total
Public Community Colleges (cont.)					
Kirtland Community College Roscommon					
Resident of district	$ 525	$1,450	$ 725	$ 600	$3,300
Non-resident of district	705	1,450	725	600	3,480
Lake Michigan College Benton Harbor					
Resident of district	560	1,450	725	600	3,335
Non-resident of district	740	1,450	725	600	3,515
Lansing Comm. Coll. Lansing					
Resident of district	600	1,450	725	600	3,375
Non-resident of district	893	1,450	725	600	3,668
Macomb County Comm. College Warren					
Resident of district	744	1,450	725	600	3,519
Non-resident of district	1,255	1,450	725	600	4,030
Mid-Michigan Comm. College Harrison					
Resident of district	589	1,450	725	600	3,364
Non-resident of district	775	1,450	725	600	3,550
Monroe County Comm. College Monroe					
Resident of district	570	1,450	725	600	3,345
Non-resident of district	840	1,450	725	600	3,615
Montcalm Comm. Coll., Sidney					
Resident of district	594	1,450	725	600	3,369
Non-resident of district	834	1,450	725	600	3,609
Muskegon Comm. College Muskegon					
Resident of district	527	1,450	725	600	3,302
Non-resident of district	775	1,450	725	600	3,550
North Central Michigan College Petoskey					
Resident of district	496	1,450	725	600	3,271
Non-resident of district	676	2,020	725	325	3,746
Northwestern Michigan College Traverse City					
Resident of district	928	1,450	725	600	3,703
Non-resident of district	1,512	2,130	725	325	4,692
Oakland Comm. College Bloomfield Hills					
Resident of district	559	1,450	725	600	3,334
Non-resident of district	869	1,450	725	600	3,644

TABLE IV-20. OPENING FALL ENROLLMENT (HEADCOUNT) IN INSTITUTIONS OF HIGHER EDUCATION IN MICHIGAN, BY INSTITUTION: 1977-1981 (cont.)

Institution and city	1977	1978	1979	1980	1981
Private institutions (cont.)					
Yeshivath Beth Yehudah, Oak Park	--	--	--	--	64
Western Theological Seminary, Holland	122	141	124	104	130
TOTAL	60,497	62,810	64,333	66,216	67,509

SOURCE: Michigan Department of Education, special release.

NOTE: Enrollment statistics are based on actual headcounts of students enrolled in degree programs, unclassified students, and graduate students.

a. Community service enrollments (in fishing, knitting, dancing, and other "leisure time" classes) not included in Fall 1977 headcounts.

b. There was a surge in part-time enrollment.

c. 1978 data, 1979 data not available.

d. 1979 data, 1980 data not available.

e. 1980 data, 1981 data not available.

f. not previously listed.

TABLE IV-21. ESTIMATE OF MICHIGAN RESIDENT STUDENT EXPENSES AT MICHIGAN INSTITUTIONS OF HIGHER EDUCATION AS OF 1 APRIL 1981: EXPENSE FOR 1981-1982 ACADEMIC YEAR (SEPTEMBER THROUGH JUNE) (cont.)

Institution	Tuition and fees	Room and Board[a]	Books and personal[b]	Travel[c]	Total
Public Community Colleges (cont.)					
St. Clair Comm. College					
Port Huron					
Resident of district	$ 612	$1,450	$ 725	$ 600	$3,387
Non-resident of district	953	1,450	725	600	3,728
Schoolcraft Coll., Livonia					
Resident of district	707	1,450	725	600	3,482
Non-resident of district	955	1,450	725	600	3,730
Southwestern Michigan Coll.					
Dowagiac					
Resident of district	651	1,450	725	600	3,426
Non-resident of district	775	1,450	725	600	3,550
Washtenaw Comm. College					
Ann Arbor					
Resident of district	480	1,450	725	600	3,255
Non-resident of district	870	1,450	725	600	3,645
Wayne County Comm. College					
Detroit					
Resident of district	622	1,450	725	600	3,397
Non-resident of district	742	1,450	725	600	3,517
West Shore Comm. Coll.					
Scottville					
Resident of district	649	1,450	725	600	3,424
Non-resident of district	979	1,450	725	600	3,754
Scholarship Eligible Colleges Only					
Non-Degree Granting Non-Profit Eligible Institutions					
Blodgett Memorial Medical Centers					
School of Nursing, Grand Rapids					
1st year[e]	3,993	1,450	725	600	6,768
2nd and 3rd years	1,180	1,611	806	667	4,264
Bronson Methodist Hospital					
School of Nursing (W. MI)					
Kalamazoo					
1st year	1,757	1,611	806	361	4,535
2nd year	800	1,611	806	361	3,578
3rd year	600	967	484	217	2,268
Butterworth Hospital School					
of Nursing (G.R.J.C.)					
1st year	839	785	725	325	2,674
2nd and 3rd year	980	785	725	361	2,851
Detroit Receiving Hospital					
School of Radiologic Technology					
Detroit	150	1,450	725	600	2,925
Detroit Institute of Commerce					
Detroit	2,735	1,450	725	600	5,510
Hackley Hospital School					
of Nursing, Muskegon	1,800	1,450	725	325	4,300
Henry Ford Hospital School					
of Nursing (U of M - Dearborn)					
Detroit					
1st year	1,660	1,000	886	397	3,943
2nd year	1,170	900	725	325	3,120

TABLE IV-21. ESTIMATE OF MICHIGAN RESIDENT STUDENT EXPENSES AT MICHIGAN INSTITUTIONS OF HIGHER EDUCATION AS OF 1 APRIL 1981: EXPENSE FOR 1981-1982 ACADEMIC YEAR (SEPTEMBER THROUGH JUNE) (cont.)

Institution	Tuition and fees	Room and Board[a]	Books and personal[b]	Travel[c]	Total
Scholarship Eligible Colleges Only (cont.)					
Non-Degree Granting Non-Profit Eligible Institutions					
Hurley Medical Center School of Nursing					
Flint					
1st year	$1,030	$1,450	$ 725	325	$3,530
2nd year	955	1,450	725	325	3,455
Mercy Central School of Nursing (Aquinas College)					
Grand Rapids					
1st year	3,442	1,611	806	361	6,220
2nd year	2,284	1,611	806	361	5,062
Mercy School of Nursing					
Detroit					
1st year	1,855	1,611	806	361	4,633
2nd year					
Saginaw Bus. Institute					
Saginaw	2,409	1,450	725	600	5,184
Shapero School of Nursing of Sinai Hospital					
Detroit	700	1,933	967	800	4,400
South Central Michigan School of Practical Nursing					
(Kellogg C.C.) Coldwater	1,550	1,772	886	733	4,941
St. Joseph Hospital School of Radiologic Technology	400	1,933	967	800	4,100

Room and Board is based upon length of program. Most institutions with dormitory facilities do not provide meals. Students are charged for room only and must purchase meals at the cafeteria. For these institutions the base figure of $1,450 was used to determine room and board.

Travel allowance is based upon dormitory facilities and length of program.

Reported to S.F.A.S. - Department of Education as of 15 March reporting date.

SOURCE: Michigan Department of Education, special release.

NOTE: Figures were developed by the Michigan Department of Education office of student financial assistance services for use in the scholarship and tuition grant programs under their jurisdiction.

a. A standard of $1,450 is assumed at institutions where the dormitories can accommodate less than 10 percent of the student body.

b. A standard of $725 is assumed at most institutions.

c. A standard of $325 is assumed at institutions where the dormitories can accommodate 10 percent or more of the student body; a standard of $600 is assumed where the dormitories can accommodate less than 10 percent.

d. Figures for Lewis College of Business, Detroit, and Cooley Law School, Lansing, represent 12 month budget figures.

e. Tuition based upon students attending Blodgett and Calvin. For students attending Grand Rapids Junior College, the college must monitor for the lower tuition charges.

TABLE IV-22. EDUCATIONAL AND GENERAL REVENUES OF MICHIGAN PUBLIC FOUR-YEAR INSTITUTIONS OF HIGHER EDUCATION: FISCAL YEARS 1979 AND 1980

(In thousands of dollars)

Institution		Tuition and fees	State appropriations	Sales and services		Other	Total
				Educational activities	Auxiliary enterprises		
Central Michigan University	1979	18,759	26,291	1,870	14,382	3,861	65,163
	1980	20,876	28,676	2,043	15,538	4,232	71,365
Eastern Michigan University	1979	12,485	30,967	677	10,728	5,399	60,256
	1980	12,992	34,054	793	11,456	7,552	66,847
Ferris State College	1979	8,456	19,416	1,153	12,927	2,742	44,694
	1980	10,316	21,388	1,533	13,855	3,841	50,933
Grand Valley State College	1979	4,871	11,794	678	2,664	3,967	23,974
	1980	5,337	12,879	720	2,953	4,372	26,261
Lake Superior State College	1979	1,658	5,039	10	2,802	1,069	10,578
	1980	1,779	5,557	10	3,127	1,285	11,758
Michigan State University	1979	52,806	129,324	13,136	60,824	63,171	319,261
	1980	58,720	142,737	14,434	66,944	74,567	357,402
Michigan Technical University	1979	7,052	17,295	637	8,460	8,273	41,717
	1980	8,208	19,077	644	9,334	9,862	47,125
Northern Michigan University	1979	6,989	18,532	1,044	8,394	2,919	37,878
	1980	7,742	20,409	1,254	8,906	3,785	42,096
Oakland University	1979	7,473	17,498	1,309	8,423	5,125	39,828
	1980	8,616	19,345	1,403	9,122	6,516	45,002
Saginaw Valley College	1979	2,040	5,864	99	1,260	1,083	10,346
	1980	2,333	6,529	196	1,479	1,221	11,758
University of Michigan[b]							
Ann Arbor	1979	68,898	131,566	20,316	34,186	259,507[a]	514,473[a]
	1980	85,421	160,322	21,839	42,230	310,019[a]	619,831[a]
Dearborn	1979	4,654	8,343	278	766	965	15,006
Flint	1979	2,378	7,646	137	153	914	11,228
Wayne State University	1979	32,504	90,810	3,751	8,308	40,396	175,769
	1980	35,755	97,172	4,480	10,802	36,670	184,879
Western Michigan University	1979	17,236	41,684	2,320	18,733	7,821	87,794
	1980	19,633	45,377	2,898	19,832	8,799	96,539
TOTAL	1979	248,259	562,069	47,415	193,010	407,212	1,457,965
	1980	277,728	613,522	52,247	215,578	472,721	1,621,796

SOURCE: Michigan Department of Education, special release.

a. Hospital revenues amounted to $134,462,526 in 1979 and $159,642,000 in 1980.

b. 1980 figures for Ann Arbor include Dearborn and Flint operations.

TABLE IV-23. EDUCATIONAL AND GENERAL EXPENDITURES OF MICHIGAN PUBLIC FOUR-YEAR INSTITUTIONS OF HIGHER EDUCATION: FISCAL YEARS 1979 AND 1980

(In thousands of dollars)

Institution		Instruction	Research	Public service	Plant operation and maintenance	Auxiliary expenditures	Total[a]
Central Michigan University	1979	25,807	180	1,660	3,908	14,783	64,314
	1980	29,087	272	1,776	4,789	13,842	71,755
Eastern Michigan University	1979	22,526	351	1,929	5,291	10,114	60,064
	1980	24,636	395	3,448	5,989	10,789	65,735
Ferris State College	1979	16,291	174	117	4,369	10,449	44,043
	1980	18,793	77	142	5,290	11,853	50,669
Grand Valley State College	1979	9,243	111	1,110	2,077	3,477	23,704
	1980	10,021	103	1,677	2,720	3,801	26,407
Lake Superior State College	1979	2,990	2	287	1,140	2,727	9,955
	1980	3,420	0	211	1,327	3,265	11,274
Michigan State University	1979	109,062	44,399	28,985	31,492	58,616	320,176
	1980	120,935	50,802	33,541	22,863	63,720	343,335
Michigan Technical University	1979	12,625	5,533	628	3,834	8,410	41,033
	1980	13,684	6,350	726	4,375	9,933	46,662
Northern Michigan University	1979	12,178	140	1,387	3,585	9,419	37,664
	1980	13,621	178	1,614	3,613	9,914	41,262
Oakland University	1979	14,082	1,599	1,484	3,409	8,276	39,695
	1980	15,113	2,121	1,967	3,332	9,062	44,510
Saginaw Valley College	1979	3,717	64	5	1,105	1,122	10,142
	1980	4,140	84	13	994	1,408	11,269
University of Michigan[c]							
Ann Arbor	1979	128,645	73,723	4,096	41,812	33,255	501,149[b]
	1980	153,185	83,784	7,125	49,135	43,640	598,479[b]
Dearborn	1979	6,671	104	334	1,759	756	14,774
Flint	1979	4,735	80	329	1,377	106	11,006
Wayne State University	1979	83,871	14,595	3,413	17,978	10,759	176,070
	1980	80,957	15,826	5,401	20,190	11,477	182,754
Western Michigan University	1979	32,549	934	2,486	7,651	21,144	87,447
	1980	34,728	1,071	3,609	7,534	21,425	93,149
TOTAL	1979	484,992	141,989	48,250	130,787	193,413	1,441,236
	1980	522,320	161,063	61,250	126,770	214,129	1,587,260

SOURCE: Michigan Department of Education, special release.

a. Also includes academic support, student services, institutional support, scholarships and fellowships, and independent operations.

b. Hospital expenditures amounted to $132,281,724 in 1979 and $154,727,838 in 1980

c. 1980 figures for Ann Arbor include Dearborn and Flint operations.

V. THE LABOR MARKET

The civilian work force is the sum of the unemployed, those workers involved in labor disputes, and total employment (wage and salary workers, farm workers, self-employed unpaid family workers, and domestics). The unemployment rate is the number of unemployed divided by the total labor force, usually stated as a percentage. The work force includes all persons aged 16 years and older who are classified as employed or unemployed. Those not in the labor force are without a job and are not looking for work for reasons of health, incarceration, college status, retirement, youth, voluntary idleness, involuntary idleness but not looking for a job, and so forth.

Civilian work force, employment, and unemployment figures are estimated from the Current Population Survey (CPS), a sample of U.S. households, not a complete count. The CPS, selected so as to be representative of the total population, is conducted each month by the Bureau of the Census. The results are turned over to the Bureau of Labor Statistics for analysis and release. For the ten largest states, of which Michigan is one, monthly labor force, employment, and unemployment figures come directly from the CPS. For the District of Columbia and the other 40 states, other procedures are used.

Sampling error is the error associated with using a sample of households rather than a complete census. The relative error varies inversely with the size of the statistic being estimated and with the size of the sample. Tables of sampling errors for the various statistics shown in Table V-1 through V-14 may be consulted in BLS publications dealing with geographic profiles of employment and unemployment, published annually.

Job data are estimated from a sample of employers taken monthly by the Michigan Employment Security Commission and similar agencies in other states and the District of Columbia. MESC estimates are made each month for the state, the major labor market areas (these coincide with the Standard Metropolitan Statistical Areas, for the most part), for small labor markets, and for the Upper Peninsula, by industry group. There is no measure of the sampling error in job data (Tables V-15 through V-18). Each year the job figures are revised on the basis of the March benchmark. The MESC carefully compares the employer sample with a tabulation of jobs reported by all employers convered under the regular state unemployment insurance system in order to make adjustments in its procedures.

The chapters dealing with retail trade, wholesale trade, and services provide greater detail on jobs for those sectors; however, the figures given there are developed differently and pertain to the mid-March pay period only. They are helpful guides as to which specific kinds of retailing, wholesaling, and services provide the most and fewest jobs. Also, the industry chapters in this Abstract have tabulations of licenses issued in various professions. In using those figures, the reader should bear in mind that, for one reason or another, not all license holders are practicing those professions.

Tables V-22 and V-23 are included because a number of analysts use these data in lieu of anything better. It must be emphasized that many establishments, such as "mom-and-pop" restaurants, grocery stores, and motels, are not covered under the state's unemployment insurance program. Coverage is least in agriculture, services, and retail trade. It is virtually complete in manufacturing.

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TABLE V-1. CIVILIAN LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN MICHIGAN AND THE UNITED STATES: 1949-1980

(Labor force, employment, and unemployment in thousands)

	Michigan				United States			
	Labor force	Employment	Unemployment		Labor force	Employment	Unemployment	
Year			Number	Rate			Number	Rate
			Original Series[a]					
1949	2,614	2,424	190	7.3	61,286	57,651	3,637	5.9
1950	2,685	2,577	108	4.0	62,208	58,918	3,288	5.3
1951	2,773	2,661	112	4.0	62,017	59,961	2,055	3.3
1952	2,790	2,675	115	4.1	62,138	60,250	1,883	3.0
1953	2,941	2,862	79	2.7	63,015	61,179	1,834	2.9
1954	2,928	2,720	208	7.1	63,643	60,109	3,532	5.5
1955	2,916	2,808	108	3.7	65,023	62,170	2,852	4.4
1956	2,934	2,744	190	6.5	66,552	63,799	2,750	4.1
			Current series					
1956	3,141	2,923	218	6.9	66,552	63,799	2,750	4.1
1957	3,076	2,874	202	6.6	66,929	64,071	2,859	4.3
1958	3,045	2,627	418	13.7	67,639	63,036	4,602	6.8
1959	2,968	2,718	250	8.4	68,369	64,630	3,740	5.5
1960	2,959	2,760	199	6.7	69,628	65,778	3,852	5.5
1961	2,954	2,655	299	10.1	70,459	65,746	4,714	6.7
1962	2,939	2,734	205	7.0	70,614	66,702	3,911	5.5
1963	2,967	2,801	166	5.6	71,833	67,762	4,070	5.7
1964	3,071	2,923	148	4.8	73,091	69,305	3,786	5.2
1965	3,211	3,086	125	3.9	74,455	71,088	3,366	4.5
1966	3,369	3,252	117	3.5	75,770	72,895	2,875	3.8
1967	3,450	3,296	154	4.5	77,347	74,372	2,975	3.8
1968	3,501	3,350	151	4.3	78,737	75,920	2,817	3.6
1969	3,594	3,449	145	4.0	80,734	77,902	2,832	3.5
1970	3,589	3,349	241	6.7	82,715	78,627	4,088	4.9
1971	3,621	3,345	276	7.6	84,113	79,120	4,993	5.9
1972	3,696	3,439	258	7.0	86,542	81,702	4,840	5.6
1973	3,805	3,581	223	5.9	88,714	84,409	4,304	4.9
1974	3,881	3,593	288	7.4	91,011	85,935	5,076	5.6
1975	3,895	3,408	486	12.5	92,611	84,783	7,830	8.5
1976	3,994	3,621	373	9.4	94,773	87,485	7,288	7.7
1977	4,117	3,780	336	8.2	97,401	90,546	6,855	7.0
1978	4,198	3,909	289	6.9	100,420	94,373	6,047	6.0
1979	4,313	3,978	335	7.8	102,908	96,945	5,963	5.8
1980	4,298	3,757	541	12.6	104,719	97,270	7,448	7.1

SOURCE: Michigan Employment Security Commission, special release; and Bureau of Labor Statistics, Employment and Earnings (Washington, D.C.: monthly), January 1980, Table A-1.

a. For Michigan there is a break in the comparability of the data in 1956. For the U.S. there is not.

TABLE V-2. ADULT CIVILIAN LABOR FORCE, LABOR FORCE PARTICIPATION RATE, AND CIVILIAN EMPLOYMENT, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, IN MICHIGAN, AND THE UNITED STATES, BY RACE AND SEX, ANNUAL AVERAGES OF MONTHLY ESTIMATES FROM THE CURRENT POPULATION SURVEY: 1970-1973 AND 1975-1980.

Race, sex, and age	1970	1971	1972	1973	1975	1976	1977	1978	1979	1980
			Detroit SMSA							
White			Civilian labor force (000)							
Men 20 yrs. & over	822	844	852	840	892	907	938	124	927	914
Women 20 yrs. & over	431	411	430	435	503	511	535	548	582	594
Negro & other races										
Men 20 yrs. & over	161	155	149	158	167	149	160	173	192	200
Women 20 yrs. & over	105	105	107	106	113	118	122	150	159	172
White			Participation rate							
Men 20 yrs. & over	82.1	83.2	82.7	83.3	82.2	82.2	83.4	82.2	82.8	81.2
Women 20 yrs. & over	39.1	37.3	38.7	39.4	42.4	43.1	44.7	45.4	48.1	48.8
Negro & other races										
Men 20 yrs. & over	83.9	81.6	71.6	74.9	73.2	69.0	69.9	75.5	78.0	67.7
Women 20 yrs. & over	50.7	45.7	45.5	45.5	44.0	44.0	45.7	53.8	55.0	51.2
White			Civilian employment (000)							
Men 20 yrs. & over	784	801	817	814	797	852	898	847	887	822
Women 20 yrs. & over	408	386	404	416	455	467	495	516	545	541
Negro & other races										
Men 20 yrs. & over	148	140	133	143	131	135	143	155	162	142
Women 20 yrs. & over	92	91	96	97	97	102	106	127	132	136
			Michigan							
White			Civilian labor force (000)							
Men 20 yrs. & over	1,856	1,884	1,926	1,929	1,954	1,973	2,025	2,021	2,027	2,034
Women 20 yrs. & over	1,014	1,002	1,040	1,063	1,154	1,203	1,233	1,250	1,320	1,363
Negro & other races										
Men 20 yrs. & over	207	200	200	216	223	211	225	242	271	257
Women 20 yrs. & over	137	139	140	151	153	158	170	206	222	209

TABLE V-2. ADULT CIVILIAN LABOR FORCE, LABOR FORCE PARTICIPATION RATE, AND CIVILIAN EMPLOYMENT, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, IN MICHIGAN, AND THE UNITED STATES, BY RACE AND SEX, ANNUAL AVERAGES OF MONTHLY ESTIMATES FROM THE CURRENT POPULATION SURVEY: 1970-1973 AND 1975-1980. (cont.)

Race, sex, and age	1970	1971	1972	1973	1975	1976	1977	1978	1979	1980
				Michigan (cont.)						
				Participation rate						
White										
Men 20 yrs. & over	82.8	82.8	82.3	82.2	81.8	81.1	81.8	80.6	80.7	79.6
Women 20 yrs. & over	41.1	40.3	41.1	42.1	44.4	46.0	46.7	46.3	48.4	49.6
Negro & other races										
Men 20 yrs. & over	83.5	82.3	75.5	76.6	73.1	71.8	70.8	76.1	78.1	71.1
Women 20 yrs. & over	51.5	47.0	46.5	47.3	44.7	45.0	48.2	55.4	55.8	50.6
				Civilian employment (000)						
White										
Men 20 yrs. & over	1,776	1,786	1,848	1,869	1,755	1,843	1,927	1,945	1,923	1,812
Women 20 yrs. & over	956	947	979	1,016	1,040	1,091	1,139	1,174	1,235	1,237
Negro & other races										
Men 20 yrs. & over	190	183	180	196	180	191	102	220	232	193
Women 20 yrs. & over	24	120	124	132	127	135	144	175	187	172
				United States						
				Civilian labor force (000)						
White										
Men 20 yrs. & over	42,463	43,088	43,961	44,490	45,617	46,179	46,960	47,733	48,583	49,245
Women 20 yrs. & over	24,616	25,030	25,822	26,647	28,609	29,660	30,852	32,233	33,545	34,686
Negro & other races										
Men 20 yrs. & over	4,726	4,773	4,847	5,049	5,238	5,348	5,504	5,731	5,904	5,967
Women 20 yrs. & over	3,664	3,768	3,888	4,067	4,351	4,617	4,833	5,182	5,366	5,557
				Participation rate						
White										
Men 20 yrs. & over	82.2	82.3	82.6	81.7	80.7	80.3	80.2	80.2	80.2	79.9
Women 20 yrs. & over	42.2	42.3	42.7	43.4	45.3	46.2	47.4	48.7	49.9	50.8
Negro & other races										
Men 20 yrs. & over	81.4	80.0	78.5	78.5	76.4	75.5	75.6	76.4	76.4	74.9
Women 20 yrs. & over	51.8	51.8	51.5	51.3	51.2	52.6	53.3	55.4	55.6	55.8

TABLE V-2. ADULT CIVILIAN LABOR FORCE, LABOR FORCE PARTICIPATION RATE, AND CIVILIAN EMPLOYMENT, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, IN MICHIGAN, AND THE UNITED STATES, BY RACE AND SEX, ANNUAL AVERAGES OF MONTHLY ESTIMATES FROM THE CURRENT POPULATION SURVEY: 1970-1973 AND 1975-1980. (cont.)

Race, sex, and age	1970	1971	1972	1973	1975	1976	1977	1978	1979	1980
United States (cont.)										
Civilian employment (000)										
White										
Men 20 yrs. & over	41,092	41,347	42,362	43,183	42,801	43,704	44,784	45,977	46,854	46,671
Women 20 yrs. & over	23,521	23,707	24,555	25,494	26,459	27,634	28,930	30,547	31,876	32,749
Negro & other races										
Men 20 yrs. & over	4,461	4,428	4,518	4,763	4,626	4,782	4,953	5,236	5,409	5,282
Women 20 yrs. & over	3,411	3,443	3,545	3,735	3,851	4,096	4,268	4,632	4,822	4,943

SOURCE: Bureau of Labor Statistics, Geographic Profile of Employment and Unemployment, Table 3, published in Washington, D.C., for the following years: 1971, Report 402 (1972); 1972, Report 421 (1973); 1973, Report 431 (1974); 1975, Report 481 (1977); 1976, Report 504 (1977); State Profile of Employment and Unemployment, 1977, Report 539 (Washington, D.C.: 1978), Table 1; Employment and Earnings, vol. 28, no. 1 (Washington, D.C.: January 1981), Tables 3 and 4, and similar documents for previous years; and special release.

TABLE V-3. LEVEL AND RATE OF ADULT UNEMPLOYMENT, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, IN MICHIGAN, AND THE UNITED STATES, BY RACE AND SEX, ANNUAL AVERAGE OF MONTHLY ESTIMATES FROM THE CURRENT POPULATION SURVEY: 1970-1973 AND 1975-1980.

Race, sex, and age	1970	1971	1972	1973	1975	1976	1977	1978	1979	1980
Detroit SMSA Total unemployed (000)										
White										
Men 20 yrs. & over	37	42	34	25	95	55	40	26	40	92
Women 20 yrs. & over	23	25	26	29	48	44	40	32	36	53
Negro & other races										
Men 20 yrs. & over	13	15	16	15	36	15	16	17	31	58
Women 20 yrs. & over	11	14	11	11	15	16	16	24	26	36
Unemployment rate										
White										
Men 20 yrs. & over	4.5	5.0	4.0	3.0	10.7	6.1	4.3	2.8	4.3	10.1
Women 20 yrs. & over	5.3	6.1	6.0	4.4	9.5	8.6	7.5	5.8	6.2	9.0
Negro & other races										
Men 20 yrs. & over	8.1	9.7	10.7	9.5	21.6	10.1	10.0	9.8	16.1	29.0
Women 20 yrs. & over	10.5	13.3	10.3	10.4	13.3	13.6	13.1	16.0	16.4	20.9
Michigan Total unemployed (000)										
White										
Men 20 yrs. & over	80	98	79	58	200	130	98	77	104	222
Women 20 yrs. & over	57	55	60	49	113	113	93	77	85	126
Negro & other races										
Men 20 yrs. & over	18	18	19	21	44	20	21	22	38	64
Women 20 yrs. & over	14	21	16	19	25	25	27	29	34	37
Unemployment rate										
White										
Men 20 yrs. & over	4.3	5.2	4.1	3.0	10.2	6.6	4.8	3.8	5.1	10.9
Women 20 yrs. & over	5.6	5.5	5.8	4.6	9.8	9.4	7.5	6.2	6.4	9.3
Negro & other races										
Men 20 yrs. & over	8.7	9.0	9.5	9.7	19.7	9.5	9.3	9.1	14.0	24.9
Women 20 yrs. & over	10.2	15.1	11.4	12.6	16.3	15.8	15.9	14.1	15.3	17.9

TABLE V-3. LEVEL AND RATE OF ADULT UNEMPLOYMENT, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, IN MICHIGAN, AND THE UNITED STATES, BY RACE AND SEX, ANNUAL AVERAGE OF MONTHLY ESTIMATES FROM THE CURRENT POPULATION SURVEY: 1970-1973 AND 1975-1980. (cont.)

Race, sex, and age	1970	1971	1972	1973	1975	1976	1977	1978	1979	1980
					United States					
					Total unemployed (000)					
White										
Men 20 yrs. & over	1,371	1,741	1,598	1,307	2,816	2,474	2,176	1,756	1,728	2,574
Women 20 yrs. & over	1,095	1,324	1,268	1,153	2,149	2,025	1,922	1,686	1,669	1,937
Negro & other races										
Men 20 yrs. & over	265	345	330	287	611	566	551	496	495	790
Women 20 yrs. & over	252	327	343	332	500	522	564	550	544	685
					Unemployment rate					
White										
Men 20 yrs. & over	3.2	4.0	3.6	2.9	6.2	5.4	4.6	3.7	3.6	5.2
Women 20 yrs. & over	4.4	5.3	4.9	4.3	7.5	6.8	6.2	5.2	5.0	5.6
Negro & other races										
Men 20 yrs. & over	5.6	7.2	6.8	5.7	11.7	10.6	10.0	8.7	8.4	13.1
Women 20 yrs. & over	6.9	8.7	8.8	8.2	11.5	11.3	11.7	10.6	10.1	11.5

SOURCE: Bureau of Labor Statistics, Geographic Profile of Employment and Unemployment, Table 3, published in Washington, D.C., for the following years: 1971, Report 402 (1972); 1972, Report 421 (1973); 1973, Report 431 (1974); 1975, Report 481 (1977); 1976, Report 504 (1977); State Profile of Employment and Unemployment, 1977, Report 539 (Washington, D.C.: 1978), Table 1; Employment and Earnings, vol. 28, no. 1 (Washington, D.C.: January 1981), Tables 3 and 4, and similar documents for previous years; and special release.

TABLE V-4. FULL AND PART-TIME STATUS OF THE CIVILIAN LABOR FORCE, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, IN MICHIGAN, AND THE UNITED STATES: 1970-1972, AND 1975-1980.

	1970	1971	1972	1975	1976	1977	1978	1979	1980
Detroit SMSA Full-time labor force									
Employed:									
Full-time schedules	1,333	1,308	1,338	1,235	891	1,275	1,296	1,577	1,434
Part-time-econ. reason	45	50	46	156	588	46	52	55	83
Unemployed (looking for full-time work):									
Number	95	108	97	208	136	83	61	141	234
Pct. full-time force	6.5	7.3	6.6	13.0	8.4	5.9	4.3	8.0	13.3
TOTAL	1,474	1,465	1,481	1,599	1,615	1,404	1,409	1,774	1,751
Part-time labor force									
Employed on voluntary part-time	192	196	213	247	246	225	228	277	265
Unemployed (looking for part-time work):									
Number	23	36	37	39	37	25	23	31	43
Pct. part-time force	10.8	15.4	14.7	13.7	13.0	10.1	9.2	10.0	13.9
TOTAL	215	231	249	286	282	250	252	308	307
Michigan Full-time labor force									
Employed:									
Full-time schedules	2,765	2,763	2,876	2,740	2,904	3,061	3,201	3,241	2,984
Part-time-econ. reason	100	107	107	155	157	157	148	148	195
Unemployed (looking for full-time work):									
Number	192	212	198	409	296	262	223	280	464
Pct. full-time force	6.3	6.9	6.2	12.4	8.8	7.5	6.2	7.6	12.7
TOTAL	3,057	3,082	3,181	3,305	3,358	3,479	3,571	3,669	3,643

TABLE V-4. FULL AND PART-TIME STATUS OF THE CIVILIAN LABOR FORCE, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, IN MICHIGAN, AND THE UNITED STATES: 1970-1972, AND 1975-1980. (cont.)

	1970	1971	1972	1975	1976	1977	1978	1979	1980
Michigan (cont.) Part-time labor force									
Employed on voluntary part-time	491	471	490	536	561	564	564	589	578
Unemployed (looking for part-time work):									
Number	50	64	63	80	78	75	67	55	77
Pct. part-time force	9.2	12.0	11.5	13.0	12.2	11.7	10.6	8.6	11.7
TOTAL	540	535	554	617	638	639	631	644	655
United States Full-time labor force									
Employed:									
Full-time schedules	65,376	65,454	67,635	68,911	71,417	73,987	77,396	79,624	79,029
Part-time, econ. reason	2,443	2,676	2,624	3,748	3,540	3,530	3,428	3,478	4,205
Unemployed (looking for full-time work):									
Number	3,201	3,949	3,769	6,437	5,874	5,432	4,706	4,639	6,111
Pct. full-time force	4.5	5.5	5.1	8.1	7.3	6.5	5.5	5.3	6.8
TOTAL	71,019	72,078	74,028	79,096	80,831	82,950	85,530	87,741	89,345
Part-time labor force									
Employed on voluntary part-time	10,808	10,990	11,443	12,124	12,528	13,028	13,549	13,843	13,997
Unemployed (looking for part-time work):									
Number	887	1,044	1,071	1,393	1,414	1,423	1,341	1,325	1,350
Pct. part-time force	7.6	8.7	8.6	10.3	10.1	9.8	9.0	8.7	8.8
TOTAL	11,696	12,034	12,513	13,517	13,942	14,451	14,890	15,167	15,347

SOURCE: Bureau of Labor Statistics, *Geographic Profile of Employment and Unemployment*, published in Washington, D.C., for the following years: 1971, Report 402 (1972), Table 4; 1972, Report 421 (1973), Table 4; 1975, Report 481, (1977), Table 7; 1976, Report 504 (1977), Table 4; *State Profile of Employment and Unemployment, 1977*, Report 539 (Washington, D.C.: 1978), Table 2; *Employment and Earnings*, vol. 28, no. 1 (Washington, D.C.: January 1981), Table 8, and similar documents for previous years; and special release.

TABLE V-5. EMPLOYMENT STATUS, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, IN MICHIGAN AND THE UNITED STATES, BY OCCUPATION GROUP: 1978-1980.

Occupation group	1978			1979			1980		
		Unemployed			Unemployed			Unemployed	
	Employed (000)	Number (000)	Rate (percent)	Employed (000)	Number (000)	Rate (percent)	Employed (000)	Number (000)	Rate (percent)
				Detroit					
Professional and technical	282	7	2.3	302	7	2.2	309	11	3.6
Managers and administrators, except farm	176	4	2.0	175	5	2.7	170	7	3.9
Sales workers	112	7	6.1	110	5	4.7	118	9	7.0
Clerical workers	339	16	4.5	369	26	6.6	367	33	8.3
TOTAL white-collar	909	34	3.6	954	43	4.4	964	60	5.9
Craft workers	269	12	4.3	262	18	6.5	233	30	11.3
Operatives exc. transport	283	27	8.8	284	46	14.0	191	84	30.4
Transport equipment operatives	72	6	7.3	77	6	7.0	67	12	15.7
Nonfarm laborers	70	10	128	74	12	13.8	73	25	25.7
TOTAL blue-collar	694	55	7.4	697	82	10.6	564	151	21.1
Service workers	264	26	8.9	249	29	10.5	252	36	12.4
Farm workers							21	0	22.5
TOTAL	1,877	142	7.0	1,909	172	8.3	1,782	247	12.2

TABLE V-5. EMPLOYMENT STATUS, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, IN MICHIGAN AND THE UNITED STATES, BY OCCUPATION GROUP: 1978-1 0. (cont.)

Occupation group	1978			1979			1980		
		Unemployed			Unemployed			Unemployed	
	Employed (000)	Number (000)	Rate (percent)	Employed (000)	Number (000)	Rate (percent)	Employed (000)	Number (000)	Rate (percent)
Michigan									
Professional and technical	549	11	2.0	567	12	2.0	587	18	3.0
Managers and administrators, except farm	361	9	2.4	353	10	2.7	354	13	3.5
Sales workers	223	14	5.8	225	12	5.1	225	17	7.0
Clerical workers	663	30	4.3	703	40	5.4	696	58	7.7
TOTAL white-collar	1,797	64	3.4	1,848	74	3.9	1,862	106	5.4
Craft workers	559	27	4.6	548	37	6.3	497	70	12.3
Operatives, exc. transport	605	57	8.6	626	82	11.6	483	165	25.5
Transport equip. operatives	154	13	7.6	168	13	7.3	144	27	15.8
Nonfarm laborers	174	25	12.4	178	30	14.5	173	50	22.4
TOTAL blue-collar	1,493	121	7.5	1,520	163	9.7	1,297	312	19.4
Service workers	561	54	8.8	556	60	9.7	550	71	11.4
Farm workers	63	3	4.0	54	4	6.4	48	5	9.4
TOTAL	3,913	289	6.9	3,978	335	7.8	3,757	494	15.2

TABLE V-5. EMPLOYMENT STATUS, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, IN MICHIGAN AND THE UNITED STATES, BY OCCUPATION GROUP: 1978-1980. (cont.)

	1978			1979			1980		
		Unemployed			Unemployed			Unemployed	
Occupation group	Employed (000)	Number (000)	Rate (percent)	Employed (000)	Number (000)	Rate (percent)	Employed (000)	Number (000)	Rate (percent)
				United States					
Professional and tech.	14,245	381	2.6	15,050	373	2.4	15,594	396	2.5
Managers and administrators, exc. farm	10,105	214	2.1	10,516	225	2.1	10,895	273	2.7
Sales workers	5,951	256	4.1	6,163	252	3.9	6,177	281	4.4
Clerical workers	16,904	866	4.9	17,613	853	4.6	18,069	1,005	5.3
TOTAL white-collar	47,205	1,717	3.5	49,342	1,703	3.3	50,735	1,955	3.7
Craft workers	12,386	603	4.6	12,880	604	4.5	12,548	887	6.6
Operatives, exc. transport	10,875	960	8.1	10,909	1,000	8.4	10,358	1,442	12.2
Transport equip. operatives	3,541	195	5.2	3,612	206	5.4	3,479	328	8.6
Nonfarm laborers	4,729	566	10.7	4,665	566	10.8	4,443	757	14.6
TOTAL blue-collar	31,531	2,323	6.9	32,066	2,377	6.9	30,828	3,414	10.0
Service workers	12,839	1,029	7.4	12,834	980	7.1	12,953	1,111	7.9
Farm workers	2,798	110	3.8	2,703	106	3.8	2,715	125	4.4
TOTAL	94,373	6,047	6.0	96,945	5,963	5.8	97,231	6,605	6.4

SOURCE: Bureau of Labor Statistics, Employment and Earnings, vol. 28, no. 1 (Washington, D.C.: January 1981), Tables 11 and 22, similar documents for previous years and special release.

TABLE V-6. OCCUPATIONAL DISTRIBUTION OF EMPLOYMENT, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, IN MICHIGAN AND THE UNITED STATES, BY SEX AND RACE: 1979 AND 1980.

	Percentage of total employment									
	1979					1980				
	Men	Women	White (both sexes)	Black/other (both sexes)	Total	Men	Women	White (both sexes)	Black/other (both sexes)	Total
					Detroit					
White-collar workers										
Professional and technical	15.5	16.3	16.7	11.5	15.8	16.9	17.9	18.0	13.7	17.3
Managers and administrators, except farm	11.9	4.9	10.0	4.3	9.1	12.3	5.8	10.6	3.8	9.6
Sales workers	5.1	6.7	6.2	3.4	5.7	6.4	6.8	7.3	2.7	6.6
Clerical workers	6.5	38.6	19.1	20.3	19.3	7.3	39.2	19.9	24.3	20.6
TOTAL	39.0	66.5	52.1	39.5	50.0	43.0	69.6	55.9	44.5	54.1
Blue-collar workers										
Craft and kindred workers	21.9	1.5	14.3	11.0	13.7	21.3	1.5	13.5	10.4	13.0
Operatives, except transport	18.3	9.7	13.8	20.3	14.9	13.7	6.7	10.0	14.6	10.7
Transport equip. operatives	6.0	1.2	3.8	5.4	4.0	5.5	1.3	3.5	5.2	3.8
Nonfarm laborers	5.4	1.5	3.7	4.5	3.9	6.2	1.2	3.9	5.4	4.1
TOTAL	51.6	13.8	35.5	41.3	36.5	46.7	10.7	30.9	35.5	31.6
Service workers	8.8	19.4	11.8	19.1	13.0	10.2	19.7	13.1	20.0	14.1
Farm workers	(a)	(a)	(a)	(a)	(a)	0.1	(a)	0.1	(a)	0.2
TOTAL EMPLOYED	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*(a) less than 1%

TABLE V-6. OCCUPATIONAL DISTRIBUTION OF EMPLOYMENT, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, IN MICHIGAN AND THE UNITED STATES, BY SEX AND RACE: 1979 AND 1980. (cont.)

	Percentage of total employment									
	1979					1980				
	Men	Women	White (both sexes)	Black/other (both sexes)	Total	Men	Women	White (both sexes)	Black/other (both sexes)	Total
	Michigan									
White-collar workers										
Professional and technical	13.9	14.8	14.4	12.9	14.3	15.1	16.3	15.8	14.3	15.6
Managers and administrators, except farm	11.6	4.6	9.5	4.2	8.9	12.1	5.7	10.0	4.0	9.4
Sales workers	4.9	6.8	5.9	3.5	5.7	5.5	6.7	6.4	2.5	6.0
Clerical workers	6.0	34.8	17.5	19.0	17.7	6.2	35.7	18.1	22.0	18.5
TOTAL	36.4	61.2	47.3	39.6	46.5	38.9	64.4	50.3	42.8	49.6
Blue-collar workers										
Craft and kindred workers	22.1	1.6	14.3	9.6	13.8	21.5	1.8	13.6	10.6	13.2
Operatives, except transport	18.9	11.2	15.0	21.5	15.7	15.4	9.3	12.5	16.2	12.8
Transport equip. operatives	6.2	1.3	4.1	5.3	4.2	5.7	1.2	3.7	4.8	3.8
Nonfarm laborers	6.4	1.6	4.4	5.3	4.5	6.8	1.5	4.5	5.4	4.6
TOTAL	53.6	15.7	37.8	41.7	38.2	49.4	13.8	34.2	37.0	34.5
Service workers	8.3	22.3	13.4	18.4	14.0	10.1	20.9	14.0	19.9	14.6
Farm workers	1.8	.8	1.5	.3	1.4	1.6	0.8	1.4	.3	1.3
TOTAL EMPLOYED	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE V-6. OCCUPATIONAL DISTRIBUTION OF EMPLOYMENT, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, IN MICHIGAN AND THE UNITED STATES, BY SEX AND RACE: 1979 AND 1980. (cont.)

	Percentage of total employment									
	1979					1980				
	Men	Women	White (both sexes)	Black/other (both sexes)	Total	Men	Women	White (both sexes)	Black/other (both sexes)	Total
					United States					
White-collar workers										
Professional and technical	15.1	16.1	15.9	12.2	15.5	15.5	16.7	16.5	12.7	16.0
Managers and administrators, except farm	14.0	6.4	11.6	5.2	10.8	14.4	6.9	12.0	5.3	11.2
Sales workers	6.0	6.9	6.8	2.8	6.4	6.0	6.8	6.8	2.9	6.4
Clerical workers	6.1	35.0	18.2	17.7	18.2	6.4	35.0	18.6	18.4	18.6
TOTAL	41.2	64.4	52.2	37.9	50.9	42.3	65.4	53.8	39.3	52.2
Blue-collar workers										
Craft and kindred workers	21.5	1.8	13.8	9.4	13.3	21.1	1.9	13.3	9.5	12.9
Operatives, except transport	11.6	10.8	10.8	15.1	11.3	11.1	10.1	10.2	14.6	10.7
Transport equip. operatives	5.9	.7	3.6	4.8	3.7	5.7	.7	3.4	4.9	3.6
Nonfarm laborers	7.3	1.3	4.5	7.4	4.8	7.0	1.2	4.3	6.9	4.6
TOTAL	46.3	14.6	32.6	36.7	33.1	44.9	13.9	31.2	35.8	31.7
Service workers	8.5	19.8	12.0	23.2	13.2	8.8	19.5	12.1	23.1	13.3
Farm workers	3.9	1.2	2.9	2.2	2.8	4.0	1.2	2.9	1.8	2.8
TOTAL EMPLOYED	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

SOURCE: Bureau of Labor Statistics, Employment and Earnings, vol. 28, no. 1 (Washington, D.C.: January 1981), Table 22, similar documents for previous years and special release.

a. Less than one percent.

TABLE V-7. UNEMPLOYED PERSONS, BY DURATION OF UNEMPLOYMENT, DATA BASED ON A HOUSEHOLD SAMPLE IN MICHIGAN AND THE UNITED STATES: 1977-1980

	Michigan				United States			
	1977	1978	1979	1980	1977	1978	1979	1980
Thousands of persons	337	289	335	541	6,855	6,047	5,963	7,461
Percentage distribution by duration of unemployment:								
Less than 15 weeks	71.3	79.5	76.4	64.7	72.2	77.2	79.8	75.4
15-26 weeks	12.3	11.3	13.5	16.5	13.1	12.3	11.5	13.8
27-51 weeks	6.9	4.4	4.5	11.6	7.5	5.3	4.5	6.5
52 weeks or longer	9.5	4.7	5.7	7.2	7.3	5.1	4.2	4.3
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

SOURCE: Bureau of Labor Statistics, *Geographic Profile of Employment and Unemployment, 1976*, Report 504 (Washington, D.C.: 1977), Table 7; *State Profile of Employment and Unemployment, 1977*, Report 539 (Washington, D.C.: 1978), Table 5; *Employment and Earnings*, vol. 24, no. 1 (Washington, D.C.: January 1976), Table 17; *Employment and Earnings*, vol. 26, no. 1 (Washington, D.C.: January 1978), Table 17; *Employment and Earnings*, vol. 27, no. 1 (Washington, D.C.: January 1980), Table 17; and special release.

TABLE V-8. UNEMPLOYED PERSONS, BY REASON FOR UNEMPLOYMENT, DATA BASED ON A HOUSEHOLD SAMPLE IN MICHIGAN AND THE UNITED STATES: 1977-1980

(In thousands)

	Michigan				United States			
	1977	1978	1979	1980	1977	1978	1979	1980
Job losers:								
On lay off	n.a.	57	91	218	853	698	835	1,476
Others	n.a.	53	72	119	2,249	1,816	1,720	2,381
TOTAL	133	110	163	337	3,103	2,514	2,555	3,857
Job leavers	44	36	44	37	889	851	854	863
Reentrant	112	96	93	120	1,926	1,814	1,758	1,886
New entrants	48	47	35	47	938	867	797	855
TOTAL UNEMPLOYED	337	289	335	541	6,855	6,047	5,963	7,461

SOURCE: Bureau of Labor Statistics, *State Profile of Employment and Unemployment, 1977*, Report 539 (Washington, D.C.: 1978), Table 6; *Employment and Earnings*, vol. 24, no. 1 (Washington, D.C.: January 1977), Table 11; *Employment and Earnings*, vol. 27, no. 1 (Washington, D.C.: January 1980), Table 13; and special release.

n.a.: not available.

TABLE V-9. MICHIGAN AND U.S. CIVILIAN LABOR FORCE, DATA BASED ON A HOUSEHOLD SAMPLE, BY MONTH: 1970-1981

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Michigan						
1970	3,563	3,547	3,549	3,559	3,567	3,570	3,672	3,692	3,570	3,641	3,572	3,627
1971	3,613	3,611	3,633	3,569	3,593	3,631	3,688	3,679	3,584	3,637	3,616	3,600
1972	3,620	3,639	3,641	3,656	3,762	3,758	3,740	3,724	3,647	3,734	3,729	3,739
1973	3,715	3,753	3,734	3,718	3,776	3,855	3,883	3,851	3,774	3,798	3,858	3,919
1974	3,867	3,872	3,847	3,828	3,831	3,879	3,950	3,933	3,855	3,920	3,913	3,856
1975	3,901	3,904	3,933	3,879	3,834	3,915	3,893	3,913	3,858	3,852	3,928	3,881
1976	3,857	3,955	3,954	3,939	3,959	4,009	4,036	4,079	4,012	4,012	4,041	4,010
1977	4,016	4,085	4,092	4,056	4,038	4,166	4,140	4,157	4,121	4,170	4,179	4,134
1978	4,164	4,162	4,128	4,158	4,159	4,243	4,230	4,203	4,187	4,185	4,232	4,275
1979	4,248	4,279	4,281	4,244	4,318	4,374	4,394	4,308	4,315	4,324	4,348	4,317
1980	4,256	4,275	4,224	4,219	4,306	4,393	4,350	4,340	4,287	4,924	4,281	4,260
1981	4,209	4,193	4,207	4,274	4,336	4,402	4,402	4,382	4,296	4,344	4,315	4,261
						United States						
1970	80,719	81,283	81,689	81,960	81,758	84,087	84,857	84,191	82,641	83,288	83,478	83,301
1971	82,818	82,885	82,866	83,116	83,344	85,228	86,296	85,984	84,456	84,974	85,374	85,255
1972	84,940	85,180	85,828	85,759	86,028	88,540	89,127	88,894	87,242	87,741	87,548	87,593
1973	86,327	87,303	87,961	88,127	88,238	91,124	91,655	90,888	89,782	90,547	90,690	90,520
1974	89,924	90,273	90,486	90,366	90,830	93,481	94,238	93,446	92,449	92,909	92,638	92,368
1975	92,200	91,972	92,464	92,459	92,888	95,174	96,053	95,525	94,023	94,510	94,041	93,995
1976	93,938	94,075	94,400	94,782	94,925	97,499	98,605	98,133	96,430	96,999	97,116	97,004
1977	96,197	96,837	97,277	97,352	97,755	100,743	100,960	100,744	99,367	100,144	100,522	100,213
1978	99,664	99,641	100,166	100,610	101,092	104,100	104,512	103,946	102,748	103,474	103,586	103,565
1979	102,802	103,185	103,606	103,198	103,476	106,210	107,096	106,489	105,510	106,084	105,871	106,040
1980	105,344	105,412	105,510	105,592	106,233	108,311	109,268	108,404	106,989	107,673	107,532	107,009
1981	106,885	107,015	107,634	107,906	108,586	109,904	110,742	110,099	108,273	109,244	109,179	108,574

SOURCE: Michigan Employment Security Commission, special release; and Bureau of Labor Statistics, special release.

NOTE: Figures represent the sum of civilian employment and unemployment and are not seasonally adjusted.

TABLE V-10. MICHIGAN AND U.S. CIVILIAN EMPLOYMENT, DATA BASED ON A HOUSEHOLD SAMPLE, BY MONTH: 1970-1981

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Michigan						
1970	3,370	3,340	3,337	3,343	3,360	3,347	3,370	3,423	3,330	3,374	3,298	3,351
1971	3,306	3,295	3,311	3,297	3,360	3,352	3,389	3,417	3,335	3,378	3,382	3,322
1972	3,333	3,349	3,343	3,362	3,472	3,456	3,431	3,484	3,407	3,547	3,527	3,558
1973	3,451	3,460	3,482	3,512	3,580	3,635	3,642	3,647	3,610	3,619	3,658	3,686
1974	3,644	3,589	3,523	3,551	3,576	3,606	3,653	3,656	3,581	3,663	3,578	3,475
1975	3,366	3,336	3,346	3,349	3,362	3,358	3,383	3,455	3,429	3,465	3,545	3,462
1976	3,462	3,532	3,533	3,546	3,591	3,611	3,650	3,699	3,677	3,711	3,703	3,676
1977	3,659	3,686	3,694	3,759	3,742	3,815	3,775	3,774	3,814	3,899	3,856	3,844
1978	3,825	3,864	3,832	3,884	3,886	3,944	3,923	3,866	3,944	3,955	3,953	3,987
1979	3,908	3,928	3,940	3,879	4,008	4,058	4,056	3,984	4,006	4,011	4,005	3,949
1980	3,817	3,794	3,757	3,694	3,698	3,772	3,732	3,792	3.772	3,768	3,744	3,741
1981	3,627	3,593	3,653	3,752	3,842	3,916	3,874	3,899	3,836	3,840	3,798	3,647
						United States						
1970	77,313	77,489	77,957	78,408	78,374	79,416	80,343	79,965	78,341	79,019	78,860	78,651
1971	77,389	77,427	77,675	78,404	78,929	79,717	80,942	80,897	79,589	80,375	80,527	80,527
1972	79,459	79,734	80,578	81,027	81,646	83,073	83,911	83,993	82,537	83,223	83,231	83,424
1973	81,598	82,405	83,397	83,900	84,383	86,217	87,042	86,616	85,552	86,716	86,562	86,390
1974	84,843	85,061	85,659	85,994	86,611	88,022	88,897	88,479	87,162	87,779	86,863	86,169
1975	83,928	83,573	84,018	84,551	85,173	86,507	87,742	87,726	86,399	87,160	86,700	86,689
1976	85,652	85,932	86,769	87,786	88,510	89,727	90,908	90,690	89,281	90,041	89,892	89,850
1977	88,217	88,601	89,597	90,660	91,475	93,154	93,879	93,846	92,788	93,779	94,027	94,183
1978	92,616	92,755	93,545	94,783	95,486	97,530	97,917	97,855	96,790	97,851	97,788	97,669
1979	96,201	96,536	97,282	97,478	98,057	99,800	100,814	100,174	99,533	100,120	99,907	100,013
1980	98,111	98,235	98,527	98,569	98,732	99,830	100,665	100,202	99,334	99,999	99,850	99,579
1981	98,139	98,401	99,364	100,345	100,855	101,419	102,612	102,152	100,389	101,028	100,502	99,562

SOURCE: Michigan Employment Security Commission, special release; and Bureau of Labor Statistics, special release.

NOTE: Employed persons comprise two groups. The first includes all those who were 16 years old or older and, during the survey week, did any work at all as paid employees, or in their own business or profession, or on their own farm, or who worked 15 hours or more as unpaid workers in a family-operated enterprise. The second includes all those who did not work but had jobs or businesses from which they were temporarily absent due to illness, bad weather, vacation, labor-management dispute, or various personal reasons--whether or not they were paid by their employers for the time off and whether or not they were seeking other jobs. Data are not seasonally adjusted.

TABLE V-11. SEASONALLY ADJUSTED MICHIGAN AND U.S. CIVILIAN EMPLOYMENT, DATA BASED ON A HOUSEHOLD SAMPLE, BY MONTH: 1970-1981

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Michigan						
1970	3,410	3,388	3,382	3,382	3,350	3,328	3,346	3,362	3,349	3,334	3,264	3,345
1971	3,347	3,343	3,358	3,338	3,354	3,333	3,353	3,356	3,350	3,337	3,345	3,314
1972	3,378	3,398	3,391	3,405	3,469	3,438	3,402	3,424	3,417	3,506	3,485	3,551
1973	3,499	3,507	3,531	3,556	3,583	3,619	3,613	3,588	3,613	3,576	3,611	3,681
1974	3,697	3,635	3,571	3,595	3,583	3,591	3,626	3,601	3,576	3,618	3,531	3,474
1975	3,419	3,376	3,393	3,389	3,374	3,343	3,360	3,405	3,417	3,418	3,501	3,463
1976	3,516	3,570	3,579	3,582	3,604	3,593	3,630	3,658	3,660	3,664	3,662	3,677
1977	3,713	3,721	3,740	3,796	3,756	3,790	3,756	3,742	3,790	3,849	3,819	3,839
1978	3,883	3,904	3,882	3,925	3,898	3,907	3,902	3,842	3,915	3,902	3,917	3,975
1979	3,975	3,976	3,997	3,926	4,019	4,010	4,029	3,959	3,970	3,955	3,967	3,932
1980	3,895	3,856	3,821	3,747	3,705	3,716	3,698	3,763	3,731	3,709	3,700	3,724
1981	3,716	3,665	3,722	3,810	3,847	3,856	3,836	3,863	3,791	3,780	3,752	3,632
						United States						
1970	78,780	78,698	78,863	78,930	78,564	78,413	78,726	78,624	78,498	78,685	78,650	78,594
1971	78,864	78,700	78,588	78,987	79,139	78,757	79,305	79,539	79,689	79,918	80,297	80,471
1972	80,959	81,108	81,573	81,655	81,887	82,083	82,230	82,578	82,543	82,616	82,990	83,400
1973	83,161	83,912	84,452	84,559	84,648	85,185	85,299	85,204	85,488	85,987	86,320	86,401
1974	86,555	86,754	86,819	86,669	86,891	86,941	87,149	87,037	87,051	86,995	86,626	86,144
1975	85,627	85,256	85,187	85,189	85,451	85,355	85,894	86,234	86,279	86,370	86,456	86,665
1976	87,400	87,672	87,985	88,416	88,794	88,563	89,093	89,223	89,173	89,274	89,634	89,803
1977	89,928	90,342	90,808	91,271	91,754	91,959	92,084	92,441	92,702	93,052	93,761	94,105
1978	94,374	94,502	94,736	95,372	95,771	96,336	96,108	96,474	96,694	97,146	97,475	97,593
1979	97,930	98,273	98,416	98,038	98,324	98,684	99,054	98,853	99,428	99,431	99,570	99,957
1980	99,833	99,913	99,607	99,112	98,963	98,785	98,891	98,920	99,208	99,328	99,534	99,632
1981	99,901	100,069	100,406	100,878	101,045	100,430	100,864	100,840	100,258	100,343	100,172	99,613

SOURCE: Michigan Employment Security Commission, special release; and Bureau of Labor Statistics, special release.

NOTE: Unemployed persons include those 16 year old or older who did not work at all during the survey week, were looking for work, and were available for work during the reference period, except for temporary illness. This includes those who were available for work and waiting to be recalled from layoff or were waiting to report to a new wage or salary job scheduled to start within the following 30 days.

TABLE V-12. MICHIGAN AND U.S. CIVILIAN UNEMPLOYMENT, DATA BASED ON A HOUSEHOLD SAMPLE, BY MONTH: 1970-1981

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Michigan						
1970	193	207	213	217	208	223	302	269	239	267	275	[illegible]
1971	306	316	323	272	234	279	308	262	249	258	234	277
1972	287	290	298	294	289	301	308	239	240	188	201	180
1973	264	293	253	206	195	220	240	204	164	179	199	233
1974	223	283	324	277	255	273	296	277	274	258	334	381
1975	535	568	587	529	471	557	510	458	429	387	383	420
1976	396	423	420	394	368	398	386	380	335	302	338	335
1977	357	400	398	296	297	352	366	383	308	270	323	291
1978	339	299	296	274	273	299	308	337	243	229	280	288
1979	341	351	340	365	311	316	338	324	309	313	343	367
1980	439	481	468	525	607	621	618	549	515	526	536	520
1981	583	600	553	521	493	486	527	483	460	504	517	614
						United States						
1970	3,406	3,794	3,732	3,552	3,385	4,671	4,514	4,226	4,300	4,269	4,618	4,650
1971	5,429	5,458	5,190	4,712	4,415	5,511	5,354	5,086	4,867	4,599	4,846	4,728
1972	5,481	5,446	5,250	4,732	4,382	5,467	5,216	4,901	4,705	4,518	4,317	4,169
1973	4,730	4,898	4,564	4,227	3,855	4,907	4,613	4,273	4,230	3,830	4,127	4,130
1974	5,081	5,212	4,826	4,372	4,219	5,459	5,341	4,967	5,287	5,131	5,775	6,199
1975	8,272	8,399	8,446	7,908	7,715	8,667	8,311	7,799	7,624	7,350	7,341	7,307
1976	8,286	8,143	7,631	6,996	6,415	7,772	7,697	7,443	7,148	6,958	7,224	7,154
1977	7,980	8,237	7,680	6,692	6,280	7,589	7,081	6,897	6,579	6,365	6,495	6,031
1978	7,048	6,886	6,621	5,826	5,605	6,481	6,597	6,090	5,958	5,624	5,797	5,896
1979	6,602	6,649	6,325	5,720	5,419	6,409	6,282	6,315	5,978	5,964	5,964	6,027
1980	7,234	7,177	6,983	7,023	7,501	8,481	8,603	8,202	7,655	7,674	7,682	7,430
1981	8,746	8,614	8,271	7,561	7,731	8,485	8,130	7,947	7,884	8,216	8,676	9,013

SOURCE: Michigan Employment Security Commission, special release; and Bureau of Labor Statistics, special release.

NOTE: Unemployed persons include those 16 years old or older who did not work at all during the survey week, were looking for work, and were available for work during the reference period, except for temporary illness. This includes those who were available for work and waiting to be recalled from layoff or were waiting to report to a new wage or salary job scheduled to start within the following 30 days.

TABLE V-13. SEASONALLY ADJUSTED MICHIGAN AND U.S. UNEMPLOYMENT RATES, DATA BASED ON A HOUSEHOLD SAMPLE, BY MONTH: 1970-1981

Year	Jan	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Michigan						
1970	4.9	5.1	5.2	5.9	6.1	6.1	7.3	7.7	7.5	8.3	8.6	7.8
1971	7.9	7.9	8.0	7.4	6.8	7.5	7.5	7.5	7.8	8.2	7.4	7.9
1972	7.4	7.0	7.1	7.7	7.9	7.8	7.5	6.9	7.5	6.3	6.4	5.0
1973	6.7	6.8	5.6	5.2	5.4	5.3	5.5	5.8	5.3	6.1	6.2	6.1
1974	5.4	6.1	7.1	6.8	6.9	6.6	7.0	7.5	8.0	8.1	9.5	10.0
1975	13.3	13.3	13.6	13.2	12.5	13.8	12.7	12.1	12.0	11.7	10.6	11.0
1976	9.8	9.5	9.4	9.6	9.6	9.5	9.2	9.6	9.2	9.0	9.1	8.6
1977	8.4	8.7	8.7	7.0	7.6	8.1	8.4	9.5	8.4	7.9	8.3	7.4
1978	7.5	6.1	6.3	6.3	6.8	6.8	6.8	8.2	6.8	6.8	7.2	7.2
1979	7.3	7.1	7.2	8.3	7.3	7.0	7.1	7.8	8.2	8.4	8.5	9.0
1980	9.4	10.1	10.3	12.0	14.1	14.1	13.7	13.0	13.2	13.4	13.3	12.7
1981	12.8	13.0	12.3	11.8	11.4	11.0	11.5	11.4	11.9	12.7	12.8	14.9
						United States						
1970	3.9	4.2	4.4	4.6	4.8	4.9	5.0	5.1	5.4	5.5	5.9	6.1
1971	5.9	5.9	6.0	5.9	5.9	5.9	6.0	6.1	6.0	5.8	6.0	6.0
1972	5.8	5.7	5.8	5.7	5.7	5.7	5.6	5.6	5.5	5.6	5.3	5.2
1973	4.9	5.0	4.9	5.0	4.9	4.9	4.8	4.8	4.8	4.6	4.8	4.9
1974	5.1	5.2	5.1	5.1	5.1	5.4	5.5	5.5	5.9	6.0	6.6	7.2
1975	8.1	8.1	8.6	8.8	9.0	8.8	8.6	8.4	8.4	8.4	8.3	8.2
1976	7.9	7.7	7.6	7.7	7.4	7.6	7.8	7.8	7.6	7.7	7.8	7.8
1977	7.5	7.6	7.4	7.2	7.0	7.2	6.9	7.0	6.8	6.8	6.8	6.4
1978	6.4	6.3	6.3	6.1	6.0	5.9	6.2	5.9	6.0	5.8	5.9	6.0
1979	5.9	5.9	5.8	5.8	5.7	5.7	5.7	6.0	5.8	6.0	5.9	6.0
1980	6.3	6.2	6.3	6.9	7.5	7.5	7.8	7.7	7.5	7.5	7.5	7.3
1981	7.4	7.4	7.3	7.3	7.5	7.4	7.2	7.3	7.6	8.0	8.3	8.8

SOURCE: Michigan Employment Security Commission, special release; and Bureau of Labor Statistics, special release.

NOTE: Figures show unemployment as a percentage of civilian labor force and are not seasonally adjusted.

TABLE V-14. MICHIGAN AND U.S. UNEMPLOYMENT RATES, DATA BASED ON A HOUSEHOLD SAMPLE, BY MONTH: 1970-1981

Year	Jan	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Michigan						
1970	5.4	5.8	6.0	6.1	5.8	6.3	8.2	7.3	6.7	7.3	7.7	7.6
1971	8.5	8.7	8.9	7.6	6.5	7.7	8.4	7.1	7.0	7.1	6.5	7.7
1972	7.9	8.0	8.2	8.0	7.7	8.0	8.2	6.4	6.6	5.0	5.4	4.8
1973	7.1	7.8	6.8	5.5	5.2	5.7	6.2	5.3	4.3	4.7	5.2	5.9
1974	5.8	7.3	8.4	7.2	6.7	7.0	7.5	7.0	7.1	6.6	8.5	9.9
1975	13.7	14.5	14.9	13.6	12.3	14.2	13.1	11.7	11.1	10.0	9.8	10.8
1976	10.3	10.7	10.6	10.0	9.3	9.9	9.6	9.3	8.4	7.5	8.4	8.3
1977	8.9	9.8	9.7	7.3	7.4	8.4	8.8	9.2	7.5	6.5	7.7	7.0
1978	8.1	7.2	7.2	6.6	6.6	7.0	7.3	8.0	5.8	5.5	6.6	6.7
1979	8.0	8.2	8.0	8.6	7.2	7.2	7.7	7.5	7.2	7.2	7.9	8.5
1980	10.3	11.3	11.1	12.4	14.1	14.1	14.2	12.6	12.0	12.3	12.5	12.2
1981	13.8	14.3	13.1	12.2	11.4	11.1	12.0	11.0	10.7	11.6	12.0	14.4
						United States						
1970	4.2	4.7	4.6	4.3	4.1	5.6	5.3	5.0	5.2	5.1	5.5	5.6
1971	6.6	6.6	6.3	5.7	5.3	6.5	6.2	5.9	5.8	5.4	5.7	5.5
1972	6.5	6.4	6.1	5.5	5.1	6.2	5.9	5.5	5.4	5.1	4.9	4.8
1973	5.5	5.6	5.2	4.8	4.4	5.4	5.0	4.7	4.7	4.2	4.6	4.6
1974	5.7	5.8	5.3	4.8	4.6	5.8	5.7	5.3	5.7	5.5	6.2	6.7
1975	9.0	9.1	9.1	8.6	8.3	9.1	8.7	8.2	8.1	7.8	7.8	7.8
1976	8.8	8.7	8.1	7.4	6.8	8.0	7.8	7.6	7.4	7.2	7.4	7.4
1977	8.3	8.5	7.9	6.9	6.4	7.5	7.0	6.8	6.6	6.4	6.5	6.0
1978	7.1	6.9	6.6	5.8	5.5	6.2	6.3	5.9	5.8	5.4	5.6	5.7
1979	6.4	6.4	6.1	5.5	5.2	6.0	5.9	5.9	5.7	5.6	5.6	5.7
1980	6.9	6.8	6.6	6.7	7.1	7.8	7.9	7.6	7.2	7.1	7.1	6.9
1981	8.2	8.0	7.7	7.0	7.1	7.7	7.3	7.2	7.3	7.5	7.9	8.3

SOURCE: Michigan Employment Security Commission, special release; and Bureau of Labor Statistics, special release.

NOTE: Figures show unemployment as a percentage of civilian labor force and are not seasonally adjusted.

TABLE V-15. MICHIGAN AND U.S. NONAGRICULTURAL WAGE AND SALARY JOBS, DATA BASED ON AN EMPLOYER SURVEY, BY MONTH: 1970-1981

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Michigan						
1970	3,031	2,998	3,016	3,035	3,061	3,075	2,984	2,988	3,053	2,876[a]	2,847[a]	3,026
1971	2,957	2,937	2,945	2,966	3,011	3,033	2,936	2,957	3,032	3,048	3,054	3,066
1972	3,022	3,020	3,037	3,073	3,125	3,144	3,035	3,112	3,185	3,214	3,223	3,239
1973	3,182	3,186	3,209	3,252	3,293	3,321	3,271	3,279	3,325	3,849	3,377	3,368
1974	3,258	3,214	3,217	3,243	3,282	3,324	3,295	3,310	3,345	3,327	3,306	3,211
1975	3,082	3,034	3,047	3,074	3,126	3,145	3,118	3,146	3,191	3,219	3,226	3,136
1976	3,163	3,178	3,200	3,252	3,285	3,315	3,266	3,298	3,338	3,344	3,376	3,383
1977	3,287	3,301	3,333	3,367	3,431	3,470	3,455	3,455	3,519	3,549	3,562	3,579
1978	3,483	3,487	3,522	3,577	3,622	3,646	3,603	3,593	3,671	3,694	3,702	3,712
1979	3,600	3,605	3,625	3,630	3,692	3,701	3,648	3,588	3,645	3,650	3,627	3,635
1980	3,501	3,499	3,491	3,438	3,417	3,424	3,349	3,370	3,435	3,492	3,520	3,514
1981	3,437	3,421	3,443	3,462	3,493	3,498	3,455	3,418	3,485	3,477	3,447	3,385
						United States						
1970	70,104	70,208	20,658	70,972	70,995	71,636	70,873	70,775	71,134	70,899	70,859	71,436
1971	69,799	69,720	70,084	70,672	71,165	71,879	71,066	71,173	71,809	72,056	72,357	72,755
1972	71,359	71,546	72,138	72,770	73,402	74,383	73,377	73,929	74,491	75,169	75,581	75,955
1973	74,491	74,869	75,422	76,008	76,591	77,508	76,568	76,971	77,562	78,185	78,587	78,715
1974	76,922	77,039	77,362	77,911	78,513	79,210	78,311	78,459	78,959	79,258	78,937	78,295
1975	76,066	75,641	75,686	76,018	76,649	77,143	76,466	76,993	77,602	78,158	78,312	78,600
1976	77,252	77,482	78,092	78,919	79,414	80,043	79,272	79,537	80,244	80,479	80,839	81,016
1977	79,427	79,636	80,493	81,418	82,252	83,210	82,551	82,845	83,798	84,298	84,744	84,980
1978	83,318	83,614	84,607	85,910	86,715	87,701	86,872	87,174	87,801	88,417	88,945	89,272
1979	87,514	87,751	88,654	89,193	90,012	90,857	89,869	89,969	90,521	91,000	91,204	91,335
1980	82,553	89,691	90,253	90,665	90,745	90,955	89,711	89,969	90,638	91,244	91,599	91,750
1981	89,988	90,245	90,817	91,337	91,848	92,481	91,600	91,626	92,026	92,424	92,272	92,015

SOURCE: Michigan Employment Security Commission, special release; and Bureau of Labor Statistics, special release.

NOTE: These figures represent the number of jobs reported by employers. A single person who holds more than one job may be counted more than once in this survey. Excluded are unpaid family workers, domestic servants in private homes, proprietors and other self-employed persons, and farm workers.

a. A prolonged labor dispute occurred at GM plants in Michigan and the rest of the nation. In Michigan, there were about 180,000 jobs not counted because of labor disputes during these two months.

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1970-1980

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[d]	Manufacturing	Other[e]
Alcona, Iosco						
1970	9,050	625	6.9	2,275	1,375	2,400
1971	9,325	725	7.8	2,425	1,050	2,575
1972	9,425	850	9.0	2,425	1,125	2,575
1973	9,275	950	10.2	2,375	1,125	2,625
1974	10,625	975	9.2	2,475	1,075	3,225
1975	11,875	1,700	14.3	2,550	1,050	3,275
1976	12,475	1,375	11.0	2,500	1,425	3,500
1977	12,275	1,500	12.2	2,475	1,250	3,475
1978	12,600	1,500	11.9	2,375	1,400	3,750
1979	13,100	1,550	11.8	2,625	1,450	3,650
1980	12,675	2,025	16.0	2,900	1,100	3,425
Alger						
1970	n.a.	n.a.	n.a.	475	800	600
1971	n.a.	n.a.	n.a.	525	825	575
1972	n.a.	n.a.	n.a.	500	825	650
1973	n.a.	n.a.	n.a.	525	775	775
1974	3,825	325	8.4	550	800	800
1975	3,450	550	15.9	550	700	825
1976	3,675	525	14.3	575	750	900
1977	3,725	525	14.2	575	900	850
1978	3,400	425	12.5	550	850	825
1979	3,650	450	12.3	575	900	850
1980	3,800	550	14.5	725	875	850
Allegan						
1970	26,550	1,575	5.9	2,775	5,925	4,075
1971	26,800	2,025	7.6	3,125	5,725	4,050
1972	28,850	1,650	5.7	3,300	6,600	4,375
1973	30,675	1,625	5.3	3,375	7,375	4,650
1974	31,525	1,900	6.0	3,325	7,350	5,000
1975	30,375	3,525	11.6	3,550	6,650	5,025
1976	30,475	2,450	8.0	3,600	6,550	5,675
1977	32,075	2,200	6.9	3,625	7,000	6,250
1978	33,075	1,900	5.7	3,600	7,425	6,800
1979	33,650	2,275	6.8	3,900	7,575	6,650
1980	34,125	3,875	11.4	4,125	6,975	6,700
Alpena						
1970	11,250	1,350	12.0	1,750	2,800	3,275
1971	11,700	1,450	12.4	1,875	2,750	3,500
1972	12,475	1,625	13.0	2,075	2,600	3,875
1973	13,000	1,675	12.9	2,100	2,725	4,100
1974	13,675	1,825	13.3	2,150	3,025	4,375
1975	14,600	2,725	18.7	2,325	2,625	4,475
1976	14,275	2,300	16.1	2,575	2,700	4,900
1977	15,300	2,125	13.9	2,425	2,700	5,350
1978	15,600	1,950	12.5	2,425	2,850	5,600
1979	15,625	1,750	11.2	2,425	2,900	5,550
1980	15,675	2,225	14.2	2,450	2,650	5,700

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1970-1980 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[d]	Manufacturing	Other[e]
Antrim						
1970	5,000	425	8.5	650	1,300	825
1971	4,975	350	7.0	675	1,125	1,025
1972	5,375	450	8.4	775	1,075	1,200
1973	6,000	450	7.5	800	1,425	1,325
1974	6,200	625	10.1	800	1,325	1,375
1975	6,525	925	14.2	900	1,125	1,375
1976	6,650	800	12.0	875	1,275	1,350
1977	6,725	700	10.4	900	1,300	1,400
1978	6,950	625	9.0	925	1,375	1,550
1979	7,575	750	9.9	1,100	1,400	1,700
1980	7,475	1,200	16.1	1,150	1,200	1,625
Arenac						
1970	4,450	250	5.6	625	975	925
1971	4,875	275	5.6	650	1,250	975
1972	5,025	425	8.5	725	1,200	975
1973	4,950	375	7.6	725	1,100	1,075
1974	5,100	575	11.3	700	925	1,175
1975	6,825	1,125	16.5	725	850	1,200
1976	7,375	875	11.9	775	900	1,450
1977	7,500	825	11.0	875	975	1,500
1978	6,675	725	10.9	750	800	1,425
1979	6,400	550	8.6	775	725	1,450
1980	6,000	900	15.0	675	350	1,550
Baraga						
1970	2,675	250	9.3	700	725	450
1971	2,675	250	9.3	700	700	475
1972	2,750	275	10.0	700	725	525
1973	2,725	200	7.3	625	725	600
1974	2,800	250	8.9	625	725	600
1975	2,800	425	15.2	650	600	625
1976	3,225	475	14.7	1,150	575	700
1977	3,025	400	13.2	700	775	725
1978	3,250	350	10.8	775	850	900
1979	3,300	375	11.4	750	750	975
1980	3,325	450	13.5	725	675	1,025
Barry, Calhoun						
1970	76,400	4,500	5.9	10,100	25,700	25,200
1971	77,300	5,500	7.1	10,400	24,900	24,900
1972	78,300	5,200	6.6	10,900	25,400	26,000
1973	79,400	4,600	5.8	11,400	26,500	27,000
1974	79,700	5,600	7.0	11,000	26,000	26,900
1975	79,000	9,900	12.5	11,400	23,000	26,900
1976	82,300	8,100	9.8	12,000	23,600	28,000
1977	80,900	6,700	8.3	12,500	23,800	29,300
1978	80,800	5,400	6.7	12,100	24,300	30,600
1979	80,000	5,500	6.9	12,200	23,800	30,300
1980	80,300	9,300	11.6	12,300	21,900	29,700

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1970-1980 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[d]	Manufacturing	Other[e]
Bay						
1970	46,500	3,700	8.0	4,400	10,500	15,000
1971	46,400	4,500	9.7	4,300	9,800	15,400
1972	46,800	4,300	9.2	4,500	9,600	16,400
1973	47,800	3,000	6.3	4,700	10,200	17,800
1974	48,400	3,900	8.1	4,700	9,900	18,100
1975	50,300	6,700	13.3	5,000	9,300	18,100
1976	51,500	4,900	9.5	5,200	10,500	18,600
1977	51,400	4,200	8.2	5,200	11,000	18,900
1978	50,300	3,300	6.6	4,800	11,100	19,100
1979	51,400	3,900	7.6	5,500	10,800	19,300
1980	53,400	8,100	15.2	5,500	9,300	19,200
Benzie						
1970	3,475	425	12.2	400	575	925
1971	3,600	350	9.7	425	550	1,025
1972	3,800	425	11.2	500	525	1,075
1973	3,775	425	11.3	550	475	1,150
1974	3,825	375	9.8	600	500	1,150
1975	3,750	550	14.7	650	500	1,100
1976	4,025	450	11.2	675	550	1,300
1977	4,175	475	11.4	675	550	1,425
1978	4,175	375	9.0	675	625	1,450
1979	4,400	550	12.5	675	700	1,375
1980	4,425	725	16.4	650	675	1,350
Berrien						
1970	70,300	4,000	5.7	6,700	29,600	23,700
1971	72,000	4,900	6.8	6,800	28,300	25,300
1972	74,000	4,500	6.1	7,000	30,200	26,800
1973	75,500	4,500	6.0	7,100	31,500	27,600
1974	75,000	5,500	7.3	7,700	29,200	28,300
1975	74,400	11,600	15.6	8,300	25,400	25,900
1976	74,800	8,400	11.2	8,500	25,500	28,200
1977	75,700	6,900	9.1	8,800	26,500	30,200
1978	74,000	6,200	8.4	8,300	26,100	30,700
1979	74,200	6,600	8.9	8,800	25,100	30,500
1980	72,900	9,600	13.2	9,000	21,300	30,300
Branch						
1970	16,650	1,150	6.9	3,100	3,750	3,175
1971	17,350	1,325	7.6	3,200	3,650	3,400
1972	18,025	1,225	6.8	3,350	3,900	3,600
1973	19,125	1,050	5.5	3,450	4,375	3,975
1974	19,275	1,400	7.3	3,500	4,100	4,075
1975	19,725	3,025	15.3	3,475	3,450	3,900
1976	21,175	2,000	9.4	3,750	4,150	4,475
1977	22,575	1,775	7.9	3,725	4,750	4,875
1978	23,225	1,375	5.9	3,650	5,425	5,050
1979	23,450	1,800	7.7	3,950	5,375	4,750
1980	21,725	2,975	13.7	3,925	4,050	4,500

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1970-1980 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[d]	Manufacturing	Other[e]
Calhoun - see Barry, Calhoun						
Cass						
1970	17,800	975	5.5	1,625	3,525	2,375
1971	17,450	1,275	7.3	1,650	3,300	2,400
1972	18,825	1,100	5.8	1,675	3,800	2,500
1973	20,725	1,050	5.1	1,725	4,325	2,850
1974	19,650	1,525	7.8	2,000	3,350	3,150
1975	19,925	2,700	13.6	2,125	2,975	3,125
1976	22,475	1,800	8.0	2,125	3,900	3,525
1977	23,600	1,725	7.3	2,325	4,175	3,675
1978	24,675	1,425	5.8	2,100	4,825	3,750
1979	23,075	1,800	7.8	2,200	4,150	3,550
1980	21,025	2,725	13.0	2,175	3,250	3,500
Charlevoix						
1970	6,700	675	10.1	650	2,325	1,575
1971	6,600	675	10.2	675	2,050	1,625
1972	6,775	650	9.6	775	1,975	1,775
1973	7,125	650	9.1	800	2,175	1,900
1974	7,925	975	12.3	925	2,275	2,050
1975	8,050	1,425	17.7	1,025	1,975	2,025
1976	8,325	1,100	13.2	1,025	2,275	2,100
1977	9,100	1,050	11.5	1,025	2,600	2,450
1978	9,500	950	10.0	1,050	2,725	2,775
1979	9,875	900	9.1	1,275	2,750	2,825
1980	9,450	1,425	15.1	1,350	2,200	2,675
Cheybogan						
1970	6,825	1,325	19.4	600	1,175	1,675
1971	7,100	1,075	15.1	650	1,150	1,950
1972	7,450	1,200	16.1	700	1,175	2,050
1973	7,650	1,300	17.0	750	1,200	2,075
1974	8,650	1,525	17.6	800	1,150	2,550
1975	8,575	2,075	24.2	850	1,000	2,650
1976	8,775	1,800	20.5	900	1,050	2,850
1977	9,200	1,900	20.7	900	1,100	3,050
1978	9,375	1,875	20.0	900	1,175	3,175
1979	[illegible]	1,550	15.9	1,050	1,275	3,375
1980	9,675	1,925	19.9	1,150	1,125	3,200
Chippewa						
1970	10,150	1,525	15.0	3,425	225	3,550
1971	11,000	1,900	17.3	3,925	200	3,625
1972	10,800	1,625	15.0	3,875	200	3,650
1973	10,675	1,825	17.1	3,800	250	3,600
1974	10,975	1,825	16.6	4,000	250	3,625
1975	12,675	2,325	18.3	4,400	250	3,650
1976	13,000	2,500	19.2	4,325	425	3,950
1977	13,025	[illegible]	17.9	4,275	475	4,150
1978	12,300	[illegible]	18.9	3,550	225	4,325
1979	11,725	2,075	17.7	3,625	300	4,100
1980	11,400	2,175	19.1	3,475	475	3,800

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1970-1980 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wages and salary workers[b]		
		Number[a]	Rate[c]	Government[a]	Manufacturing	Other[e]
Clare						
1970	6,000	575	9.6	1,050	825	1,350
1971	6,750	900	13.3	1,075	700	1,675
1972	6,775	1,050	15.5	1,125	500	1,850
1973	7,325	850	11.6	1,175	825	1,900
1974	7,950	1,025	12.9	1,200	825	2,100
1975	8,500	1,525	17.9	1,275	700	2,050
1976	8,900	1,200	13.5	1,275	900	2,200
1977	9,350	1,250	13.4	1,250	975	2,325
1978	9,725	1,000	10.3	1,275	1,150	2,500
1979	9,925	1,025	10.3	1,425	1,050	2,625
1980	9,625	1,475	15.3	1,375	725	2,675
Clinton, Eaton, Ingham, Ionia						
1970	177,600	11,500	6.5	50,300	37,500	58,100
1971	183,500	11,800	6.4	50,300	41,100	60,700
1972	190,500	11,800	6.2	52,500	40,300	66,700
1973	194,100	9,700	5.0	53,900	43,700	68,800
1974	197,300	15,200	7.7	57,400	38,500	69,500
1975	209,100	24,000	11.5	59,500	35,000	69,800
1976	211,300	18,100	8.6	60,800	38,500	71,300
1977	220,100	17,000	7.7	63,500	42,000	74,600
1978	255,700	14,400	6.4	64,800	44,500	79,500
1979	233,900	15,600	6.7	66,200	44,700	83,800
1980	236,900	24,900	10.5	67,200	38,500	85,700
Crawford						
1970	2,650	275	10.4	475	550	725
1971	2,875	275	9.6	500	500	875
1972	3,100	425	13.7	525	475	925
1973	3,275	425	13.0	550	600	950
1974	4,025	425	10.6	575	900	1,175
1975	4,100	675	16.5	625	675	1,200
1976	4,000	500	12.5	750	600	1,325
1977	4,075	500	12.3	650	600	1,375
1978	3,900	475	12.2	600	550	1,375
1979	3,850	575	14.9	650	325	1,450
1980	3,475	600	17.3	575	250	1,325
Delta						
1970	13,475	1,150	8.5	1,675	3,400	4,700
1971	15,075	1,450	9.6	2,600	2,850	6,175
1972	14,225	1,450	10.2	1,725	2,925	5,425
1973	13,800	1,100	8.0	1,775	3,100	5,325
1974	14,175	1,150	8.1	1,800	3,250	5,575
1975	16,200	1,900	11.7	1,900	3,000	5,625
1976	16,100	1,575	9.8	1,925	3,550	5,425
1977	16,375	1,800	11.0	2,200	3,475	5,325
1978	15,950	1,625	10.2	2,200	3,350	5,700
1979	16,900	1,825	10.8	2,400	3,400	5,850
1980	17,025	2,000	11.7	2,475	3,175	6,125

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1970-1980 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[d]	Manufacturing	Other[e]
Dickinson						
1970	8,900	575	6.5	1,650	1,425	4,125
1971	9,175	575	6.3	1,650	1,425	4,325
1972	9,525	575	6.0	1,750	1,625	4,300
1973	9,825	575	5.9	1,825	1,700	4,550
1974	10,075	600	6.0	1,850	1,900	4,575
1975	10,975	1,000	9.1	1,900	1,900	4,575
1976	11,050	925	8.4	1,925	1,950	4,800
1977	11,475	875	7.6	2,000	2,125	5,050
1978	12,000	875	7.3	1,975	2,325	5,375
1979	12,425	850	6.8	2,100	2,325	5,650
1980	12,625	1,075	8.5	2,200	2,350	5,675
Eaton - see Clinton, Eaton, Ingham, Ionia						
Emmet						
1970	7,700	825	10.7	925	1,000	3,675
1971	8,275	875	10.6	950	1,075	3,975
1972	8,875	800	9.0	1,050	1,075	4,500
1973	9,425	800	8.5	1,075	1,250	4,875
1974	10,275	1,025	10.0	1,125	1,350	5,225
1975	12,225	1,675	13.7	1,250	1,075	5,275
1976	12,650	1,300	10.3	1,375	1,075	5,625
1977	13,075	1,275	9.8	1,350	1,125	5,975
1978	13,350	1,150	8.6	1,250	1,300	6,300
1979	13,450	1,275	9.5	1,300	1,375	6,200
1980	12,900	1,600	12.4	1,275	1,200	5,825
Genesee, Shiawassee						
1970	197,300	16,400	8.3	22,600	71,900	69,300
1971	193,700	14,700	7.6	22,300	79,100	69,200
1972	196,100	14,700	7.5	23,900	78,100	71,500
1973	201,100	12,400	6.2	24,500	84,600	74,000
1974	202,400	23,000	11.4	24,700	72,600	72,300
1975	200,500	32,200	16.1	26,900	68,200	71,800
1976	204,800	20,300	9.9	28,100	76,900	76,600
1977	212,400	18,600	8.8	28,000	83,100	80,800
1978	215,900	17,000	7.9	25,500	85,600	86,400
1979	223,400	19,600	8.8	28,300	85,100	88,300
1980	229,400	40,500	17.7	29,900	71,000	88,400
Gladwin - see Midland, Gladwin						
Gogebic						
1970	7,450	500	6.7	1,300	1,075	2,175
1971	7,575	625	8.3	1,325	1,025	2,225
1972	7,700	575	7.5	1,350	1,050	2,225
1973	7,775	475	6.1	1,350	1,200	2,300
1974	8,125	500	6.2	1,375	1,200	2,475
1975	8,250	750	9.1	1,500	1,050	2,525
1976	8,300	1,075	13.0	1,500	1,200	2,325
1977	8,075	1,000	12.4	1,525	975	2,500
1978	8,050	800	9.9	1,525	950	2,725
1979	8,275	650	7.9	1,550	925	2,875
1980	8,600	750	8.7	1,550	900	3,125

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1970-1980 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[d]	Manufacturing	Other[e]
Grand Traverse, Kalkaska, Leelanau						
1970	22,400	1,850	8.3	3,500	3,375	9,100
1971	23,900	2,250	9.4	3,700	3,300	9,700
1972	23,500	2,000	8.5	4,025	2,975	10,600
1973	24,825	1,825	7.4	4,200	3,350	11,900
1974	28,775	2,300	8.0	4,500	3,650	12,700
1975	32,525	4,025	12.4	4,775	3,625	13,025
1976	34,625	3,850	11.1	4,675	3,750	14,600
1977	37,200	3,475	9.3	4,975	3,925	16,300
1978	39,525	2,925	7.4	5,350	4,475	18,650
1979	42,125	2,700	6.4	5,550	4,925	19,800
1980	42,725	3,900	9.1	5,950	4,500	19,975
Gratiot						
1970	16,500	1,975	12.0	1,525	3,300	5,575
1971	16,275	2,375	14.6	1,525	3,150	5,450
1972	16,525	1,800	10.9	1,650	3,500	5,700
1973	16,650	1,625	9.8	1,600	3,725	5,850
1974	16,825	2,425	14.4	1,650	3,350	5,750
1975	17,275	3,700	21.4	1,775	2,650	5,600
1976	18,250	3,125	17.1	1,775	3,225	6,000
1977	18,025	2,750	15.3	1,750	3,225	6,175
1978	17,300	2,200	12.7	1,725	3,175	6,175
1979	16,400	1,675	10.2	2,000	2,850	6,175
1980	16,275	2,275	14.0	2,200	2,400	6,050
Hillsdale						
1970	15,650	1,025	6.5	1,800	3,525	3,050
1971	15,900	1,175	7.4	1,825	3,450	3,125
1972	17,350	1,050	6.1	1,925	4,075	3,300
1973	18,400	800	4.3	1,950	4,875	3,475
1974	18,775	1,250	6.7	2,025	4,750	3,575
1975	19,300	3,300	17.1	2,100	3,575	3,675
1976	20,625	1,875	9.1	2,275	4,200	4,475
1977	20,125	1,600	8.0	2,375	4,225	4,275
1978	20,450	1,100	5.4	2,150	4,725	4,500
1979	21,000	1,600	7.6	2,200	4,525	4,775
1980	20,000	2,375	11.9	2,275	3,325	5,000
Houghton, Keewenaw						
1970	12,025	1,350	11.2	2,925	900	3,925
1971	12,550	1,600	12.7	2,975	850	4,100
1972	12,225	1,375	11.2	3,125	850	3,975
1973	12,350	1,300	10.5	3,200	875	4,100
1974	12,725	1,175	9.2	3,350	900	4,325
1975	13,550	1,750	12.9	3,575	775	4,675
1976	13,700	1,925	14.1	3,525	825	4,800
1977	14,325	1,900	13.3	3,950	825	5,000
1978	15,625	1,750	11.2	4,200	825	5,950
1979	15,350	1,525	9.9	4,425	800	5,700
1980	15,875	1,850	11.7	4,525	750	5,925

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIRES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1970-1980(cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[d]	Manufacturing	Other[e]
Huron						
1970	13,525	1,700	12.6	1,725	2,225	3,825
1971	13,700	1,650	12.0	1,750	2,200	3,900
1972	14,375	1,950	13.6	1,725	2,600	3,925
1973	14,250	1,275	8.9	1,750	3,425	3,650
1974	13,975	1,825	13.1	1,650	3,025	3,550
1975	13,900	3,000	21.6	1,750	2,225	3,675
1976	13,525	1,975	14.6	1,675	1,900	4,125
1977	13,150	1,850	14.1	1,650	1,850	4,325
1978	13,925	1,550	11.1	1,675	2,800	4,350
1979	13,925	1,300	9.3	1,850	2,475	4,500
1980	13,950	2,350	16.8	1,875	2,125	4,300
Ingham - see Clinton, Eaton, Ingham, Ionia						
Ionia - see Clinton, Eaton, Ingham, Ionia						
Iosco - see Alcona, Iosco						
Iron						
1970	5,000	675	13.5	900	350	1,450
1971	4,950	575	11.6	925	325	1,500
1972	4,850	525	10.8	975	250	1,500
1973	5,025	500	10.0	950	275	1,625
1974	5,400	500	9.3	975	525	1,600
1975	6,425	775	12.1	1,050	575	1,625
1976	6,250	800	12.8	1,050	575	1,700
1977	6,175	650	10.5	1,075	575	1,725
1978	6,025	575	9.5	975	675	1,800
1979	6,050	550	9.1	1,050	625	1,750
1980	5,950	675	11.3	1,075	600	1,650
Isabella						
1970	16,975	950	5.6	4,900	800	4,600
1971	17,400	1,175	6.8	5,150	700	4,625
1972	17,875	1,200	6.7	5,100	750	4,925
1973	18,950	1,300	6.9	5,475	925	5,175
1974	20,400	1,650	8.1	5,650	1,000	5,600
1975	21,925	2,150	9.8	6,100	825	5,625
1976	23,025	1,725	7.5	6,350	1,050	6,775
1977	25,275	1,775	7.0	6,575	1,150	6,950
1978	25,725	1,475	5.7	6,475	1,275	7,450
1979	26,225	1,700	6.5	6,650	1,250	7,525
1980	26,375	2,200	8.3	6,550	1,175	7,675
Jackson						
1970	58,300	3,500	6.0	7,600	17,900	21,200
1971	58,200	4,200	7.2	7,700	16,300	21,700
1972	61,500	3,300	5.4	7,900	17,700	24,100
1973	64,000	2,800	4.4	8,300	19,300	25,400
1974	65,800	3,800	5.8	8,100	18,300	25,700
1975	64,900	7,800	12.0	8,100	16,100	25,200
1976	65,000	6,500	10.0	8,600	14,700	26,700
1977	65,500	5,400	8.2	8,600	15,600	27,800

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1970-1980 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[d]	Manufacturing	Others[e]
Jackson (cont.)						
1978	65,700	3,800	5.8	8,400	16,400	29,000
1979	68,300	4,900	7.2	8,700	16,700	29,500
1980	66,100	7,700	11.6	9,500	14,300	27,800
Kalamazoo, Van Buren						
1970	107,800	5,900	5.5	17,400	34,300	35,300
1971	107,700	7,100	6.6	17,500	32,100	36,200
1972	110,400	6,300	5.7	17,500	33,600	38,200
1973	114,400	5,600	4.9	17,700	35,700	41,000
1974	117,500	6,900	5.9	19,000	35,200	43,200
1975	122,700	12,400	10.1	19,700	31,800	45,100
1976	124,200	9,500	7.6	19,900	32,700	46,900
1977	126,700	8,400	6.6	19,900	33,800	49,600
1978	128,300	7,400	5.8	19,400	34,600	52,900
1979	134,200	7,600	5.7	20,200	36,000	55,000
1980	134,900	11,400	8.5	20,300	33,200	55,900
Kalkaska - see Grand Traverse, Kalkaska, Leelanau						
Kent, Ottawa						
1970	228,600	14,900	6.5	20,000	72,500	99,300
1971	231,600	17,100	7.4	20,400	70,700	100,800
1972	241,200	15,200	6.3	21,700	76,400	105,800
1973	252,400	13,700	5.4	24,000	83,100	112,900
1974	257,300	16,500	6.4	26,500	79,800	116,200
1975	263,900	29,500	11.2	28,300	70,300	117,200
1976	269,800	20,800	7.7	29,000	77,100	121,800
1977	278,500	17,600	6.3	30,300	83,800	126,600
1978	294,600	14,600	5.0	30,100	90,500	138,800
1979	309,400	16,600	5.4	31,300	96,000	143,800
1980	313,200	26,300	8.4	33,200	91,200	144,000
Keweenaw - see Houghton, Keweenaw						
Lake						
1970	2,075	150	7.2	350	75	250
1971	2,375	175	7.4	350	100	300
1972	2,350	175	7.4	350	100	325
1973	2,625	175	6.7	375	125	350
1974	2,525	200	7.9	400	75	375
1975	2,600	400	15.4	425	50	400
1976	2,600	250	9.6	425	75	450
1977	2,725	250	9.2	450	75	450
1978	2,500	200	8.0	400	75	450
1979	2,725	325	11.9	500	50	475
1980	2,650	425	16.0	500	50	400
Lapeer - see Lapeer, Livingston, Macomb, Oakland, St. Clair, Wayne						
Leelanau - see Grand Traverse, Kalkaska, Leelanau						
Lenawee						
1970	34,750	2,425	7.0	3,625	13,300	8,300
1971	35,600	3,275	9.2	3,675	12,725	8,675
1972	36,475	2,875	7.9	3,875	13,425	9,125

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1970-1980 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[d]	Manufacturing	Others[e]
Lenawee (cont.)						
1973	36,950	2,300	6.2	3,875	14,525	9,450
1974	37,875	3,700	9.8	4,025	13,050	10,050
1975	37,050	6,575	17.7	4,050	10,325	9,700
1976	36,850	4,025	10.9	4,225	11,425	10,525
1977	37,975	3,650	9.6	4,275	12,025	11,150
1978	37,600	2,450	6.5	4,325	12,450	11,650
1979	39,100	3,125	8.0	4,625	12,450	12,000
1980	38,650	5,625	14.6	4,825	10,575	11,675
Livingston, Lapeer, Macomb, Oakland, St. Clair, Wayne[f]						
1970	1,804.0	115.5	6.4	223.1	569.0	759.2
1971	1,799.4	134.6	7.5	226.6	550.1	756.0
1972	1,837.9	126.5	6.9	230.0	565.6	786.9
1973	1,879.9	102.3	5.4	230.5	612.3	820.9
1974	1,909.7	129.1	6.8	243.5	581.6	834.1
1975	1,865.4	219.6	11.8	250.8	505.5	811.3
1976	1,910.8	171.9	9.0	251.1	545.2	839.0
1977	1,977.5	155.2	7.8	257.2	583.1	888.8
1978	2,013.1	132.3	6.6	255.6	608.9	935.2
1979	2,052.0	160.8	7.8	255.7	580.5	955.8
1980	2,030.5	266.8	13.1	253.0	494.1	941.3
Luce						
1970	2,500	275	11.0	1,150	250	475
1971	2,925	600	20.5	1,225	250	475
1972	2,750	425	15.5	1,200	250	500
1973	2,750	425	15.5	1,200	200	575
1974	2,850	450	15.8	1,175	275	600
1975	3,300	725	22.0	1,150	200	625
1976	3,375	775	23.0	1,225	225	625
1977	4,100	825	20.1	1,850	200	700
1978	3,275	725	22.1	1,250	175	650
1979	3,125	350	11.2	1,325	225	700
1980	3,075	400	13.0	1,325	175	675
Mackinac						
1970	4,550	750	16.5	500	75	1,325
1971	5,100	750	14.7	675	100	1,325
1972	5,500	600	10.9	825	100	1,450
1973	5,675	525	9.3	825	150	1,550
1974	5,975	525	8.8	875	200	1,650
1975	6,375	700	11.0	925	150	1,675
1976	5,950	625	10.5	900	200	1,625
1977	6,400	800	12.5	950	175	1,800
1978	6,450	750	11.6	900	125	2,000
1979	6,875	1,100	16.0	900	175	1,975
1980	6,425	1,075	16.7	900	175	1,750
Macomb - see Livingston, Lapeer, Macomb, Oakland, St. Clair, Wayne						
Manistee						
1970	8,100	900	11.1	900	2,450	2,150

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1970-1980 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[e]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[a]	Manufacturing	Others[e]
Manistee (cont.)						
1971	8,300	900	10.8	925	2,450	2,150
1972	8,400	1,125	13.4	975	2,350	2,175
1973	8,575	1,125	13.1	1,000	2,450	2,225
1974	8,600	1,175	13.7	1,100	2,500	2,100
1975	9,650	1,900	19.7	1,200	2,550	2,200
1976	9,675	1,450	15.0	1,200	2,600	2,450
1977	9,825	1,250	12.7	1,225	2,750	2,625
1978	9,875	1,100	11.1	1,225	2,900	2,700
1979	9,875	925	9.4	1,400	2,825	2,775
1980	9,775	1,275	13.0	1,450	2,550	2,700
Marquette						
1970	n.a.	n.a.	n.a.	6,975	1,325	10,875
1971	n.a.	n.a.	n.a.	7,525	1,150	10,600
1972	n.a.	n.a.	n.a.	7,650	1,225	10,775
1973	n.a.	n.a.	n.a.	7,350	1,175	12,450
1974	26,350	1,600	6.1	6,725	1,125	14,300
1975	27,050	2,275	8.4	6,925	1,200	14,525
1976	32,275	2,725	8.4	7,450	1,150	18,050
1977	31,550	2,750	8.7	7,825	925	16,550
1978	34,300	2,500	7.3	8,000	950	19,750
1979	30,775	2,825	9.2	7,900	975	16,675
1980	29,975	4,075	13.6	7,950	925	15,200
Mason						
1970	9,275	575	6.2	1,025	2,300	2,925
1971	9,825	850	8.7	1,075	2,175	3,175
1972	10,150	825	8.1	1,100	2,125	3,500
1973	10,575	875	8.3	1,175	2,400	3,500
1974	10,850	800	7.4	1,300	2,675	3,300
1975	11,425	1,450	12.7	1,375	2,350	3,375
1976	11,550	1,125	9.7	1,450	2,400	3,500
1977	12,150	1,150	9.5	1,500	2,475	3,800
1978	12,200	925	7.6	1,475	2,650	3,925
1979	12,700	1,350	10.6	1,575	2,675	4,000
1980	12,750	1,675	13.1	1,675	2,500	3,950
Mecosta						
1970	10,550	800	7.6	3,250	2,000	1,800
1971	10,800	1,050	9.7	3,450	1,650	1,900
1972	10,900	800	7.3	3,500	1,700	1,975
1973	10,800	875	8.1	3,600	1,550	2,025
1974	11,500	750	6.5	3,900	1,600	2,275
1975	12,500	1,375	11.0	3,950	1,575	2,300
1976	13,175	1,200	9.1	4,075	1,600	2,825
1977	13,950	1,150	8.2	4,325	1,675	2,925
1978	14,150	950	6.7	4,200	1,700	3,225
1979	14,050	1,025	7.3	4,450	1,650	3,150
1980	14,750	1,375	9.3	4,775	1,575	3,250

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1970-1980 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[d]	Manufacturing	Others[e]
Menominee						
1970	9,200	500	5.4	1,025	2,675	2,100
1971	9,100	600	6.6	1,025	2,525	2,075
1972	9,400	525	5.6	1,050	2,725	2,150
1973	9,625	500	5.2	1,100	2,850	2,225
1974	9,900	475	4.8	1,125	3,025	2,225
1975	10,075	900	8.9	1,350	2,675	2,225
1976	10,175	725	7.1	1,400	2,875	2,425
1977	10,325	700	6.8	1,425	2,925	2,475
1978	10,750	775	7.2	1,475	2,975	2,850
1979	11,150	775	7.0	1,625	2,850	3,050
1980	10,800	1,000	9.3	1,675	2,675	2,850
Midland, Gladwin						
1970	28,600	1,250	4.4	3,600	14,325	9,500
1971	27,700	1,775	6.4	3,600	13,225	9,100
1972	27,775	1,875	6.8	3,675	13,075	9,325
1973	27,150	1,800	6.6	3,650	13,275	9,075
1974	28,600	3,150	11.0	3,525	11,400	9,850
1975	33,000	4,225	12.8	3,750	13,525	10,400
1976	35,025	3,625	10.3	3,900	13,925	12,100
1977	36,850	3,225	8.8	4,100	13,600	14,550
1978	37,000	2,925	7.9	3,875	13,400	15,550
1979	37,300	2,850	7.6	4,175	13,100	15,825
1980	37,250	4,175	11.2	4,150	12,800	15,100
Missaukee, Wexford						
1970	n.a.	n.a.	n.a.	1,575	2,400	3,400
1971	n.a.	n.a.	n.a.	1,550	2,350	3,550
1972	n.a.	n.a.	n.a.	1,575	2,400	3,575
1973	n.a.	n.a.	n.a.	1,600	2,750	3,875
1974	11,900	1,550	13.0	1,625	2,825	3,575
1975	12,800	2,775	21.7	1,725	2,475	3,650
1976	12,875	2,375	18.4	1,800	2,650	3,800
1977	14,125	2,175	15.4	1,825	3,050	4,475
1978	13,750	1,725	12.5	1,825	3,425	4,700
1979	14,250	1,500	10.5	1,950	3,550	4,750
1980	14,600	2,300	15.8	2,100	3,075	4,800
Monroe[g]						
1970	45,625	2,275	5.0			
1971	46,175	2,600	5.6			
1972	47,000	2,250	4.8			
1973	48,350	2,100	4.3			
1974	49,300	2,800	5.7			
1975	49,175	4,625	9.4			
1976	50,300	3,575	7.1			
1977	51,350	3,525	6.9			
1978	52,450	3,200	6.1			
1979	63,250	5,950	9.4			
1980	62,500	7,275	11.6			

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1970-1980 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[d]	Manufacturing	Others[e]
Montcalm						
1970	15,650	1,025	6.5	1,825	5,025	3,700
1971	16,300	1,375	8.4	1,850	5,025	3,975
1972	15,075	1,400	9.3	2,025	4,175	4,325
1973	15,650	1,175	7.5	2,075	4,400	4,475
1974	17,200	1,350	7.8	2,000	4,775	4,525
1975	17,950	3,375	18.8	2,225	4,375	4,625
1976	18,300	3,425	18.7	2,275	4,100	5,025
1977	18,850	3,050	16.2	2,325	4,500	5,350
1978	18,975	2,625	13.8	2,250	5,025	5,550
1979	19,325	1,875	9.7	2,500	5,550	5,675
1980	20,100	2,900	14.4	2,525	5,300	5,750
Montmorency						
1970	1,725	150	8.7	325	325	325
1971	2,050	250	12.2	300	375	375
1972	2,350	325	13.8	350	475	400
1973	2,675	400	15.0	350	600	450
1974	2,850	500	17.5	350	600	450
1975	2,550	550	21.6	375	475	475
1976	2,700	300	11.1	375	600	525
1977	2,800	275	9.8	375	675	600
1978	3,100	275	8.9	400	625	700
1979	3,200	450	14.1	350	675	675
1980	2,725	700	25.7	300	325	675
Muskegon, Oceana						
1970	69,700	5,900	8.5	7,800	25,100	21,700
1971	69,100	6,600	9.6	8,200	21,900	21,900
1972	69,900	6,300	9.0	8,200	22,800	23,200
1973	69,600	5,200	7.5	8,400	23,300	24,100
1974	71,800	5,600	7.8	9,100	23,900	24,800
1975	73,800	10,800	14.6	10,100	21,200	24,600
1976	73,500	7,400	10.1	10,300	21,800	25,900
1977	74,200	6,800	9.2	10,500	22,100	26,600
1978	74,200	6,300	8.5	9,900	22,000	28,200
1979	76,800	6,700	8.7	10,500	22,500	29,100
1980	78,100	10,500	13.4	11,200	20,200	28,700
Newaygo						
1970	10,550	800	7.6	1,425	1,700	1,925
1971	11,050	900	8.1	1,500	1,750	1,975
1972	11,025	975	8.8	1,475	1,700	2,025
1973	11,275	825	7.3	1,475	1,800	2,200
1974	11,500	925	8.0	1,525	1,800	2,250
1975	12,475	1,800	14.4	1,625	1,775	2,350
1976	12,825	1,475	11.5	1,700	1,875	2,500
1977	12,850	1,500	11.7	1,725	1,800	2,525
1978	12,825	1,325	10.3	1,625	1,950	2,675
1979	12,625	1,350	10.7	1,725	1,800	2,725
1980	13,125	2,075	15.8	1,650	1,700	2,725

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1970-1980 (cont.)

(Average of 12 monthly figures)

County or group Of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[d]	Manufacturing	Others[e]
Oakland - see Livingston, Lapeer, Macomb, Oakland, St. Clair, Wayne						
Oceana - see Muskegon, Oceana						
Ogemaw						
1970	4,500	700	15.6	575	450	1,075
1971	5,200	1,075	20.7	600	500	1,175
1972	5,000	600	12.0	650	550	1,275
1973	5,500	400	7.3	675	775	1,475
1974	5,600	575	10.3	700	800	1,500
1975	6,250	1,050	16.8	750	675	1,425
1976	6,900	775	10.9	775	825	1,725
1977	7,025	850	12.1	725	825	1,775
1978	7,575	850	11.2	800	950	1,975
1979	7,775	800	10.3	725	975	2,150
1980	7,475	1,050	14.0	650	750	2,050
Ontonagon						
1970	3,850	250	6.5	750	450	3,100
1971	4,050	300	7.4	750	425	2,950
1972	3,950	350	8.9	750	475	3,275
1973	4,100	275	6.7	750	450	3,500
1974	4,200	275	6.5	750	475	3,400
1975	4,325	425	9.8	775	500	3,425
1976	3,650	825	22.6	750	375	2,275
1977	3,400	675	19.9	750	425	2,050
1978	3,200	550	17.2	825	425	2,050
1979	3,150	400	12.7	900	475	1,975
1980	3,375	425	12.6	900	550	2,075
Osceola						
1970	n.a.	n.a.	n.a.	750	2,000	1,025
1971	n.a.	n.a.	n.a.	800	1,775	925
1972	n.a.	n.a.	n.a.	825	1,975	925
1973	n.a.	n.a.	n.a.	900	2,425	975
1974	7,450	425	5.7	950	2,625	925
1975	7,325	700	9.6	1,100	2,175	1,000
1976	7,350	800	10.9	1,175	2,050	1,075
1977	7,175	800	11.1	1,200	1,850	1,150
1978	7,150	575	8.0	1,200	1,950	1,125
1979	7,350	675	9.2	1,425	1,850	1,175
1980	7,850	1,075	13.7	1,525	1,825	1,225
Oscoda						
1970	1,575	125	7.9	275	150	350
1971	1,675	150	9.0	275	150	400
1972	1,825	225	12.3	300	175	375
1973	1,850	250	13.5	325	175	350
1974	2,025	350	17.3	325	225	300
1975	2,250	575	25.6	300	200	350
1976	2,550	425	16.7	350	325	425
1977	2,475	400	16.2	325	325	400
1978	2,350	375	16.0	325	275	400
1979	2,350	350	14.9	400	225	450
1980	2,375	450	18.9	375	200	400

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1970-1980 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[d]	Manufacturing	Others[e]
Otsego						
1970	4,125	350	8.5	825	850	1,425
1971	4,525	400	8.8	875	775	1,675
1972	4,925	375	7.6	900	775	1,850
1973	5,000	400	8.0	925	925	2,025
1974	5,350	550	10.3	950	925	2,050
1975	6,000	800	13.3	950	675	2,125
1976	6,675	650	9.7	1,000	850	2,450
1977	7,025	625	8.9	1,050	925	2,675
1978	8,225	600	7.3	1,050	1,000	3,450
1979	9,275	650	7.0	1,200	1,175	3,750
1980	9,050	800	8.8	1,325	950	3,700
Ottawa - see Kent, Ottawa						
Presque Isle						
1970	4,100	275	6.7	650	150	1,900
1971	4,300	225	5.2	625	150	2,125
1972	4,325	300	6.9	725	150	2,025
1973	4,300	350	8.1	750	150	1,950
1974	4,250	325	7.6	750	150	1,950
1975	4,175	550	13.2	825	150	1,850
1976	4,325	450	10.4	850	200	1,950
1977	4,425	475	10.7	825	225	2,025
1978	4,500	500	11.1	850	175	2,150
1979	4,450	625	14.0	1,000	125	1,975
1980	4,500	900	20.0	925	150	1,850
Roscommon						
1970	3,625	125	3.4	750	375	1,400
1971	3,750	225	6.0	750	375	1,375
1972	4,000	375	9.4	775	375	1,450
1973	4,125	375	9.1	850	400	1,500
1974	4,225	425	10.1	875	450	1,500
1975	4,900	650	13.3	950	425	1,550
1976	5,400	775	14.4	975	550	1,675
1977	5,500	675	12.3	1,000	475	1,850
1978	5,450	625	11.5	1,150	475	1,775
1979	5,675	675	11.9	1,325	450	1,850
1980	5,700	875	15.4	1,275	400	1,900
Saginaw						
1970	83,600	4,400	5.3	9,000	29,100	32,700
1971	88,400	5,300	6.0	9,100	32,900	34,500
1972	89,000	4,800	5.4	9,300	33,100	36,000
1973	91,000	4,500	4.9	9,500	35,000	37,000
1974	91,600	6,300	6.9	10,200	32,600	37,700
1975	91,100	10,500	11.5	11,000	29,000	37,000
1976	95,700	8,600	9.0	11,200	32,300	38,800
1977	97,200	6,700	6.9	11,100	34,400	40,500
1978	99,[illegible]00	5,600	5.6	11,100	36,600	42,400
1979	102,800	7,800	7.6	11,600	36,200	42,700
1980	101,800	14,700	14.4	11,600	29,300	42,900

TABLE V-16. CIVILIAN LABOR FORCE UNEMPLOYMENT,, AND UNEMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1970-1980 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[d]	Manufacturing	Others[e]
St. Clair - see Livingston, Lapeer, Macomb, Oakland, St. Clair, Wayne						
St. Joseph						
1970	20,325	1,000	4.9	2,625	8,950	4,250
1971	20,950	1,150	5.5	2,650	8,925	4,575
1972	20,925	1,100	5.3	2,675	8,975	4,675
1973	21,650	1,075	5.0	2,675	9,375	5,025
1974	23,100	1,950	8.4	2,650	9,425	5,400
1975	22,100	3,300	14.9	2,875	8,025	5,075
1976	22,175	2,050	9.2	2,950	8,550	5,475
1977	23,200	1,850	8.0	3,025	9,100	6,000
1978	24,125	1,725	7.2	2,925	9,875	6,450
1979	25,250	2,650	10.5	3,375	9,300	6,575
1980	25,550	2,975	11.6	3,425	9,500	6,500
Sanilac						
1970	14,200	1,275	9.0	1,625	3,475	1,975
1971	15,300	1,975	12.9	1,550	3,600	2,075
1972	16,025	2,075	12.9	1,575	3,775	2,300
1973	17,000	1,875	11.0	1,800	4,200	2,600
1974	15,700	1,625	10.4	1,775	3,500	2,825
1975	14,800	2,050	13.9	1,900	2,900	2,775
1976	14,675	1,350	9.2	1,925	2,925	2,900
1977	15,625	1,375	8.8	1,900	3,525	3,075
1978	15,525	1,350	8.7	1,850	3,625	3,225
1979	15,600	1,850	11.9	2,025	3,325	3,275
1980	15,695	2,950	18.8	2,100	2,725	3,225
Schoolcraft						
1970	3,025	350	11.6	600	325	1,150
1971	3,075	350	11.4	625	325	1,150
1972	3,025	375	12.4	600	325	1,125
1973	2,925	300	10.3	550	350	1,175
1974	2,925	325	11.1	550	350	1,150
1975	3,475	500	14.4	550	300	1,200
1976	3,425	425	12.4	550	325	1,275
1977	3,575	450	12.6	575	375	1,300
1978	3,725	475	12.8	675	350	1,350
1979	3,825	550	14.4	775	350	1,275
1980	3,625	550	15.2	750	350	1,175
Shiawassee - see Genesee, Shiawassee						
Tuscola						
1970	18,525	1,475	8.0	3,475	2,450	3,200
1971	17,650	1,500	8.5	3,400	2,025	3,200
1972	18,625	1,650	8.9	3,450	2,325	3,350
1973	19,575	1,200	6.1	3,425	2,700	3,650
1974	21,025	2,075	9.9	3,350	2,600	4,075
1975	21,875	3,925	17.9	3,450	2,000	4,175
1976	23,000	2,525	11.0	3,550	2,525	4,675
1977	24,025	2,275	9.9	3,525	2,875	4,975
1978	24,540	1,975	8.0	3,525	2,950	5,400
1979	25,325	2,250	8.9	3,850	3,000	5,400
1980	25,425	4,300	16.9	4,025	2,325	5,200

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1970-1980 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[d]	Manufacturing	Other[e]
Van Buren - see Kalamazoo, Van Buren						
Washtenaw						
1970	104,800	5,600	5.3	38,700	33,000	31,000
1971	106,400	7,000	6.6	37,500	35,400	31,000
1972	107,600	5,300	4.9	37,500	36,500	32,900
1973	115,400	5,200	4.5	38,500	39,300	38,300
1974	117,000	7,600	6.5	39,600	35,600	41,100
1975	121,200	15,000	12.4	40,300	31,800	39,400
1976	125,600	10,300	8.2	41,400	36,800	41,200
1977	130,100	8,500	6.5	41,700	40,800	44,300
1978	136,100	7,400	5.4	41,700	44,000	49,000
1979	145,000	8,400	5.8	43,300	46,800	51,700
1980	144,500	11,900	8.2	44,600	42,900	52,400
Wayne - see Livingston, Lapeer, Macomb, Oakland, St. Clair, Wayne						
Wexford - see Missaukee, Wexford						
Upper Peninsula						
1970	107,500	9,900	9.2	23,500	13,500	43,600
1971	112,100	11,500	10.3	24,300	12,900	42,500
1972	112,100	10,800	9.6	25,100	13,600	44,300
1973	114,000	9,800	8.6	24,900	14,600	47,800
1974	119,500	10,200	8.5	26,100	15,500	49,900
1975	129,000	15,000	11.6	28,200	14,300	50,900
1976	134,200	15,900	11.8	28,400	15,000	52,300
1977	135,600	15,700	11.6	28,700	15,200	53,100
1978	138,300	14,500	10.5	28,800	15,400	56,300
1979	136,500	14,300	10.5	29,900	15,000	53,500
1980	135,900	17,100	12.6	30,300	14,700	51,900
Michigan[h]						
1970	3,589.0	241.0	6.7	506.7	1,081.1	1,411.3
1971	3,621.0	276.0	7.6	509.5	1,059.2	1,426.4
1972	3,696.0	258.0	7.0	526.9	1,097.4	1,494.7
1973	3,805.0	223.0	5.9	534.4	1,178.8	1,571.1
1974	3,881.0	288.0	7.4	562.6	1,114.0	1,601.1
1975	3,895.0	486.0	12.5	583.1	983.7	1,569.8
1976	3,994.0	373.0	9.4	593.7	1,058.9	1,598.8
1977	4,117.0	336.0	8.2	596.8	1,128.4	1,717.3
1978	4,198.0	289.0	6.9	611.4	1,179.6	1,818.4
1979	4,313.0	335.0	7.8	621.0	1,160.1	1,855.9
1980	4,298,000	541,000	12.6	627,800	1,007,200	1,819,100

SOURCE: Michigan Employment Security Commission, special release.

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1970-1980 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment			Wage and salary workers[b]		
		Number[a]	Rate[c]		Government[d]	Manufacturing	Other[e]

a. Labor force includes persons involved in labor disputes. Employment and unemployment figures are on the basis of place of residence; wage and salary figures by place of work.

b. By place of work as opposed to place of residence.

c. Unemployment as a percentage of civilian labor force. Civilian labor force data are developed on the basis of questions asked at a sample of households, whereas the number of nonfarm wage and salary jobs is estimated by querying selected employers. The difference between the two stems largely from nonfarm self-employment (lawyers, dentists, physicians, and other professionals in private practice; domestic workers; "mom and pop" grocery stores, restaurants, and motels; and so forth), agricultural employment (both owners and their employees), workers involved in labor disputes who otherwise would be employed, multiple jobholding on the part of some employed persons, and sampling differences. Also, a worker might be employed in a factory or office in one state, and counted there in the employer survey, but live in another state, and be counted there in the household survey.

d. Federal, state and local. Includes public school employees and faculty and others employed full and part time at publicly owned universities.

e. Construction, transportation, communication, public utilities, wholesale trade, retail trade, finance, insurance, real estate, services, and mining.

f. Totals in thousands.

g. Monroe is part of the Toledo, Ohio, labor market area. Separate data for place of work are not compiled.

h. All 83 counties, including Monroe, totals are in thousands.

n.a.: not available

TABLE V-17. CIVILIAN NONFARM WAGE AND SALARY JOBS IN MICHIGAN, DATA BASED ON AN EMPLOYER SURVEY, BY INDUSTRY: 1968-1980

(Averages of 12 monthly estimates, in thousands of jobs)

Industry	1968	1969	1970	1971
Manufacturing industries	1,162.0	1,193.1	1,081.1	1,059.2
Durable goods industries	940.8	968.1	863.0	879.5
Lumber and wood products	11.2	11.9	13.8	14.1
Furniture and fixtures	23.0	24.0	20.7	19.6
Metal industries	242.3	248.3	231.6	227.4
Primary metal products	101.4	106.5	89.3	86.8
Fabricated metal products	140.9	141.7	142.3	140.6
Machinery (nonelectrical)	171.9	180.1	163.5	137.3
Electrical machinery	48.6	45.5	42.5	40.6
Transportation equipment	396.8	412.4	350.8	368.1
Motor vehicles and equipment	382.8	398.7	335.3	353.6
Other	14.0	13.6	15.5	14.5
Other durable goods	47.0	46.0	40.1	40.0
Nondurable goods industries	221.2	224.9	218.1	212.1
Food and kindred products	55.1	54.5	54.6	53.4
Textile mill products and apparel	26.2	6.5	22.4	23.6
Paper and allied products	28.5	28.5	28.9	26.8
Printing, publishing, and allied industries	31.9	34.7	34.6	34.2
Chemicals and petroleum refining and related industries	49.1	49.0	47.5	45.0
Other nondurable goods	30.4	31.8	30.1	29.1
Private nonmanufacturing industries[a]	1,330.7	1,398.3	1,411.3	1,426.4
Contract construction	107.7	128.6	118.5	120.5
Transportation, communication, and public utilities	145.6	149.7	150.4	148.2
Wholesale trade	135.8	137.2	144.8	144.8
Retail trade	433.8	455.8	458.3	460.7
Finance, real estate, and insurance	109.6	115.5	119.7	121.0
Selected services	385.5	399.5	407.8	420.1
Mining	12.6	12.0	11.8	11.1
Government	470.6	493.7	506.7	509.5
Federal	57.9	56.2	57.7	54.9
State	102.4	109.6	116.0	117.8
Local	310.4	327.9	333.0	336.8
TOTAL	2,963.3	3,085.1	2,999.1	2,995.1

TABLE V-17. CIVILIAN NONFARM WAGE AND SALARY JOBS IN MICHIGAN, DATA BASED ON AN EMPLOYER SURVEY, BY INDUSTRY: 1968-1980 (cont.)

(Averages of 12 monthly estimates, in thousands of jobs)

1972	1973	1974	1975	1976	1977	1978	1979	1980
1,097.4	1,178.8	1,114.0	983.7	1,061.7	1,128.4	1,179.6	1,160.1	1,007.2
879.5	953.1	897.2	778.2	845.4	905.9	952.8	935.1	803.8
15.2	16.1	15.5	12.8	14.1	14.4	14.4	14.1	11.8
20.8	22.5	21.9	18.6	19.6	20.0	21.5	23.0	21.5
234.6	252.5	235.5	199.9	223.5	237.3	247.2	238.8	190.3
87.6	95.6	93.9	79.5	86.2	91.6	91.7	88.0	69.1
147.0	156.9	141.6	120.4	137.3	145.7	155.5	150.8	121.2
140.3	155.6	158.1	136.6	138.0	150.6	159.8	167.2	157.3
42.3	47.1	45.4	38.2	39.6	40.9	42.7	41.9	37.5
384.3	416.0	377.6	332.8	370.5	400.1	423.7	405.6	344.1
369.6	401.0	366.1	321.2	357.7	386.5	409.6	392.7	333.5
14.7	15.0	11.5	11.6	12.8	13.6	14.1	12.9	10.6
42.0	43.3	43.2	39.3	40.1	42.6	43.5	44.5	41.3
217.9	225.7	216.8	205.5	216.3	222.5	226.8	225.0	203.4
52.3	51.7	51.8	51.2	51.3	51.9	52.3	52.1	49.5
24.9	27.3	24.7	22.2	25.9	27.3	27.7	25.8	18.4
26.5	26.9	26.3	23.5	24.6	24.4	23.7	23.8	20.9
36.7	36.9	35.5	34.6	33.7	32.3	33.6	34.1	33.3
44.7	45.6	44.4	45.9	48.1	49.7	48.7	47.8	46.8
32.8	37.3	34.1	27.8	32.7	36.9	40.8	41.4	34.5
1,494.7	1,571.1	1,601.1	1,569.8	1,626.8	1,717.3	1,818.4	1,855.9	1,819.1
127.5	131.4	125.8	106.3	110.0	122.8	138.8	139.5	117.1
148.0	153.6	153.2	144.8	145.6	150.8	155.9	160.6	150.5
146.0	150.6	153.5	146.9	148.8	151.8	164.2	170.4	161.0
478.9	503.3	510.9	509.6	531.1	557.1	584.9	590.9	576.8
127.7	130.3	134.2	134.0	136.9	142.2	147.4	154.5	156.1
454.6	489.0	510.1	514.4	541.2	580.5	613.9	626.8	645.1
12.0	12.9	13.4	13.8	13.2	12.1	13.3	13.2	12.5
526.9	534.4	562.6	583.1	594.6	596.8	611.4	621.0	627.8
55.3	55.0	56.3	56.1	55.5	54.7	54.6	56.7	58.4
122.5	123.9	127.5	132.6	135.1	136.9	143.6	147.7	151.1
349.1	355.5	378.8	394.4	404.0	405.2	413.2	416.6	418.3
3,119.0	3,284.3	3,277.7	3,136.6	3,283.1	3,442.5	3,609.4	3,637.0	3,454.1

SOURCE: Michigan Employment Security Commission, special release.

a. Excludes domestic workers and agricultural employment.

TABLE V-18. CIVILIAN WAGE AND SALARY EMPLOYMENT IN MICHIGAN, DATA BASED ON EMPLOYER SURVEY, LABOR MARKET AREA, BY INDUSTRY: 1980

(Averages of 12 monthly estimates, in thousands of jobs)

Industry	Ann Arbor	Battle Creek	Bay City	Benton Harbor	Detroit
Manufacturing industries	42.9	21.9	9.3	21.3	494.1
Durable goods industries	38.8	12.5	6.9	16.4	413.8
Lumber and wood products	.1	.1	.2	.3	1.7
Furniture and fixtures	(D)	(D)	(D)	(D)	1.7
Metal industries	2.7	3.6	.8	4.7	97.7
Primary metal products	.4	1.2	(D)	3.1	36.1
Fabricated metal products	2.3	2.4	(D)	1.6	61.6
Machinery (nonelectrical)	2.2	6.9	(D)	4.1	90.3
Electrical machinery	(D)	(D)	1.5	(D)	8.0
Transportation equipment	23.4	.7	2.9	1.9	196.1
Motor vehicles and equipment	(D)	(D)	(D)	(D)	190.6
Other	(D)	(D)	(D)	(D)	5.5
Other durable goods	10.4	1.2	1.5	5.4	18.3
Nondurable goods industries	4.1	9.4	2.4	4.9	80.3
Food and kindred products	.4	6.9	.6	1.0	18.4
Textile mill products and apparel	(D)	(D)	(D)	(D)	12.8
Paper and allied products	.3	1.2	(D)	.9	3.5
Printing, publishing, and allied industries	2.1	.6	.2	1.4	15.9
Chemicals and petroleum refining and related industries	(D)	.3	(D)	.2	16.1
Other nondurable goods	1.3	.4	1.6	1.4	13.6
Private nonmanufacturing industries[a]	52.4	29.7	19.2	30.3	941.3
Contract construction	2.8	1.7	.9	2.3	51.8
Transportation, communication, and public utilities	3.2	2.3	1.8	2.0	81.5
Wholesale trade	2.5	1.4	1.8	2.2	82.7
Retail trade	16.8	9.4	6.5	9.7	284.5
Finance, real estate, and insurance	4.2	3.8	1.3	2.2	89.7
Selected services	22.9[b]	11.1[b]	6.9[b]	1.9[b]	349.8
Mining	(D)	(D)	(D)	(D)	1.3
Government	44.6	12.3	5.5	9.0	253.0
Federal	2.2	3.9	.3	.5	33.2
State	31.6	.6	.3	.6	35.6
Local	10.8	7.8	4.9	7.9	184.2
TOTAL	139.9	63.9	34.0	60.6	1,688.4

TABLE V-18. CIVILIAN WAGE AND SALARY EMPLOYMENT IN MICHIGAN, DATA BASED ON AN EMPLOYER SURVEY, LABOR MARKET AREA, BY INDUSTRY: 1980 (cont.)

(Averages of 12 monthly estimates, in thousands of jobs)

Flint	Grand Rapids	Jackson	Kalamazoo	Lansing	Muskegon	Saginaw	Upper Peninsula
71.0	91.2	14.3	33.2	38.5	20.2	29.3	14.7
67.4	65.9	11.5	15.7	34.0	17.3	26.5	9.8
.1	1.3	(D)	.2	.5	.1	.3	3.2
(D)	14.3	(D)	(D)	.3	1.4	.2	.8
10.5	19.5	3.7	6.1	4.6	7.1	8.9	1.4
(D)	4.4	.8	1.5	(D)	5.8	(D)	.9
(D)	15.1	2.9	4.6	(D)	1.3	(D)	.5
2.0	14.1	2.6	3.3	3.6	7.1	4.0	2.6
2.1	4.1	.9	.3	.2	(D)	(D)	(D)
52.0	4.3	3.3	3.3	23.9	.6	12.4	.7
(D)	2.5	(D)	(D)	(D)	(D)	(D)	(D)
(D)	1.8	(D)	(D)	(D)	(D)	(D)	(D)
.7	8.0	1.0	25.	.9	1.0	.7	1.1
3.6	25.3	2.8	17.5	4.5	2.9	2.7	4.9
1.1	7.0	.4	2.0	1.3	.6	1.6	.9
.2	2.7	.1	(D)	(D)	(D)	(D)	(D)
.4	1.7	(D)	4.9	(D)	(D)	(D)	2.7
1.0	3.9	.4	1.5	1.3	.3	.5	.9
(D)	5.6	(D)	7.1	(D)	.7	.5	(D)
.9	4.4	1.9	2.0	1.9	1.3	.2	.4
88.4	14.4	27.8	55.9	85.7	28.7	42.9	51.9
6.1	11.7	1.4	4.8	6.4	2.1	2.4	3.7
6.0	11.3	5.2	3.8	5.6	3.1	4.9	5.1
9.8	14.9	1.5	3.2	7.1	1.9	2.5	2.9
30.3	46.5	8.7	18.5	28.1	10.0	15.4	16.2
6.7	10.8	1.8	.7	9.4	1.8	4.1	3.1
29.5[b]	48.5	9.2[b]	21.8	29.1[b]	9.6	13.6[b]	15.3
(D)	.3	(D)	.1	(D)	.2	(D)	5.6
29.9	33.2	9.5	20.3	67.2	11.2	11.5	30.3
1.7	2.0	.5	1.1	2.7	.5	1.2	3.5
2.2	3.1	2.1	7.4	39.3	1.3	1.4	9.0
26.0	28.1	6.9	11.8	25.2	9.4	9.0	17.8
189.3	268.4	51.6	109.4	191.4	60.1	83.8	69.9

SOURCE: Michigan Employment Security Commission, special release.
NOTE: Labor Market Areas are the same as Standard Metropolitan Statistical Areas, except for Benton Harbor (Berrien County), Port Huron (St. Clair County), and Upper Peninsula (15 counties) which are not SMSAs.
a. Excludes domestic workers and agricultural employment.
b. Includes mining.
(D): Withheld to avoid disclosing data for individual companies.

TABLE V-19. TRANSACTIONS AFFECTING THE BALANCE IN THE MICHIGAN UNEMPLOYMENT COMPENSATION FUND, FISCAL YEARS ENDED 30 JUNE: 1948-1980 (cont.)

(In thousands of dollars)

Fiscal year	Employers' contributions	Interest earned and credited	Miscellaneous transactions	Cumulative net income to fund[a]	Net benefit payments	Cumulative benefit payments[a]	Balance in fund
1972	232,574.7	15,199.6	---	3,868,395.4	284,871.9[d]	3,523,688.8	344,706.6
1973	338,939.6	19,086.9	---	4,226,421.8	214,737.6[d]	3,738,426.4	487,995.4
1974	313,218.6	29,504.9	---	4,539,640.4	330,066.5[d]	4,068,492.9	500,652.4
1975	299,102.7	18,383.2	81,000.0[e]	4,938,126.3	813,219.0[d]	4,881,711.9	85,919.3
1976	368,355.1	15,426.0	490,000.0[e]	5,796,496.8	727,131.5[d]	5,608,843.4	217,158.3
1977	558,208.6	0	53,000.0[e]	6,357,432.1	523,723.5[d]	6,132,566.9	304,643.4
1978	680,179.3	248.8[f]	---	6,698,039.8	439,511.8[d]	6,672,933.5	598,833.0
1979	730,733.7	6,753.1	---	7,435,526.5	498,512.0[d]	7,221,718.8	837,807.7
1980	635,368.9	3,529.2	540,000.0[e]	8,074,737.9	1,254,019.1[d]	8,425,464.5	138,686.7

SOURCE: Michigan Employment Security Commission, Annual Report, 1948 through 1980 (Lansing: annually), Appendix, p. 31 (1980 data).

a. 1 January 1937 - 30 September 1980.

b. Includes funds credited to the Michigan account in the Unemployment Trust Fund on 1 July of indicated year by the Secretary of the Treasury in accordance with the provisions of Title IX, Section 903 of the Social Security Act, as amended by Public Law 567, 83rd Cong., 2nd sess. (Reed bill) and $113 million advanced in September 1958 under provisions of Title XII, Section 1201, of the Social Security Act. Repayment of $15,381,202.36 was made through 30 June 1967 under automatic repayment provisions of the Federal Unemployment Tax Act.

c. Final repayments were made during 1968 by direct transfer from the fund of the outstanding balance on the 1958 loan of $113 million in the amount of $71,187,297.64 and on 1958-1959 TUC costs in the amount of $13,673,334.98. Installment repayments were also made annually by direct transfer from the fund on the loan balance in 1964, 1965, and 1966, and on TUC costs in 1965 and 1966.

d. Includes state share of extended benefits.

e. Advance from federal unemployment account.

f. Adjustment for prior years.

TABLE V-20. WORK STOPPAGES IN MICHIGAN AND THE UNITED STATES, NUMBER, WORKERS INVOLVED, AND MAN-DAYS IDLE: 1942-1979

	Michigan				United States			
			Man-days idle during year				Man-days idle during year	
Year	Number of stoppages	Workers involved (000)	Number (000)	Percent[a]	Number of stoppages	Workers involved (000)	Number (000)	Percent[a]
1942	261	114.7	258.6	--	2,968	840.0	4,180.0	.05
1943	413	274.5	592.3	--	3,752	1,980.0	13,500.0	.15
1944	562	568.7	1,836.9	--	4,956	2,120.0	8,720.0	.09
1945	478	521.1	5,960.0	--	4,750	3,470.0	38,000.0	.47
1946	311	248.0	10,600.0	--	4,985	4,600.0	116,000.0	1.43
1947	188	180.0	2,550.0	--	3,693	2,170.0	34,600.0	.41
1948	196	262.0	2,450.0	--	3,419	1,960.0	34,100.0	.37
1949	139	240.0	2,120.0	--	3,606	3,030.0	50,500.0	.59
1950	322	345.0	7,360.0	--	4,843	2,410.0	38,800.0	.44
1951	315	215.0	1,600.0	--	4,737	2,220.0	22,900.0	.23
1952	326	311.0	3,500.0	--	5,117	3,540.0	59,100.0	.57
1953	331	297.0	2,450.0	--	5,091	2,400.0	28,300.0	.26
1954	204	171.0	1,060.0	--	3,468	1,530.0	22,600.0	.21
1955	327	292.0	1,740.0	--	4,320	2,650.0	28,200.0	.26
1956	210	98.8	1,190.0	--	3,825	1,900.0	33,100.0	.29
1957	208	138.0	1,280.0	.24	3,673	1,390.0	16,500.0	.14
1958	275	437.0	3,400.0	.72	3,694	2,060.0	23,900.0	.22
1959	172	83.5	2,680.0	.53	3,708	1,880.0	69,000.0	.61
1960	145	65.3	722.0	.14	3,333	1,320.0	19,100.0	.17
1961	180	239.0	1,820.0	.38	3,367	1,450.0	16,300.0	.14
1962	196	81.4	1,440.0	.28	3,614	1,230.0	18,600.0	.16
1963	135	36.8	611.0	.12	3,362	941.0	16,100.0	.13
1964	197	249.0	4,540.0	.83	3,655	1,640.0	22,900.0	.18
1965	229	82.0	1,560.0	.27	3,963	1,550.0	23,300.0	.18
1966	275	143.0	1,820.0	.30	4,405	1,960.0	25,400.0	.19
1967	283	284.0	5,180.0	.81	4,595	2,870.0	42,100.0	.30
1968	354	261.1	7,752.7	1.22	5,045	2,649.0	49,018.0	.32
1969	305	90.2	1,614.5	.22	5,700	2,481.0	42,869.0	.28
1970	313	323.6	11,143.5	1.75	5,716	3,305.2	66,413.8	.37
1971	282	126.3	2,942.8	.46	5,138	3,279.6	47,589.1	.32
1972	167	54.2	851.3	.13	5,010	1,713.6	27,066.4	.17
1973	262	210.7	1,788.8	.22	5,353	2,250.7	27,948.4	.14
1974	346	121.7	3,130.8	.38	6,074	2,777.7	47,990.9	.24
1975	189	35.0	934.6	.12	5,031	1,745.6	31,237.0	.16
1976	260	209.0	3,151.3	.38	5,648	2,420.0	37,858.9	.19
1977	327	97.9	1,717.1	.20	5,506	2,040.1	35,821.8	.17
1978	300	93.7	1,756.9	.20	4,230	1,622.6	36,912.5	.17
1979	349	90.7	1,592.5	.17	4,827	1,727.1	34,752.7	.15

SOURCES: Bureau of Labor Statistics, *Work Stoppages, 1978* (Washington, D.C.: 1980), Summary 80-4, Tables 7 (1978 data), *Analysis of Work Stoppages, 1974, Bulletin 1902* (Washington, D.C.: 1976), Table 21 (1974 data), *Handbook of Labor Statistics 1975--Reference Edition*, Bulletin 1865 (Washington, D.C.: 1975), Table 159 (1941-1973 U.S. data), and Table 164 (1956-1973 Michigan data), and various BLS bulletins commencing with 711 (1941) and ending with 1196 (1955: 1941-1955 Michigan data).

a. Percentage of estimated total working time. Data for individual states not published prior to 1957.

TABLE V-19. TRANSACTIONS AFFECTING THE BALANCE IN THE MICHIGAN UNEMPLOYMENT COMPENSATION FUND, FISCAL YEARS ENDED 30 JUNE : 1948-1980

(In thousands of dollars)

Fiscal year	Employers' contributions	Interest earned and credited	Miscellaneous transactions	Cumulative net income to fund[a]	Net benefit payments	Cumulative benefit payments[a]	Balance in fund
1948	70,233.6	4,941.3	---	642,454.9	35,927.8	381,240.3	261,214.6
1949	79,584.3	6,184.9	---	728,224.2	50,056.5	431,296.8	296,927.4
1950	68,839.0	6,363.7	---	803,426.9	82,853.5	514,150.3	289,276.5
1951	71,272.1	6,817.7	---	881,516.6	27,519.6	541,670.0	339,846.7
1952	77,834.3	7,667.0	---	967,018.0	62,955.8	604,625.7	362,392.2
1953	83,921.3	8,735.1	---	1,059,674.4	39,846.4	644,472.1	415,202.3
1954	81,546.8	10,313.8	---	1,151,535.0	96,097.9	740,570.1	410,965.0
1955	61,695.5	8,652.9	---	1,221,883.3	114,805.2	855,375.3	366,508.1
1956	61,471.7	8,231.1	---	1,291,586.2	105,559.3	960,934.6	330,651.6
1957	96,133.5	7,620.4	1,847.1[b]	1,397,187.2	134,977.2	1,095,911.8	301,275.5
1958	113,509.3	7,030.4	3,755.6[b]	1,521,482.5	269,470.4	1,365,382.2	156,100.3
1959	121,143.9	2,546.9	114,704.5[b]	1,759,877.8	193,522.4	1,558,904.6	200,973.2
1960	154,066.2	2,830.3	---	1,916,774.3	135,611.5	1,694,516.1	222,258.2
1961	149,374.3	2,820.1	---	2,068,968.7	224,542.4	1,919,058.5	149,910.2
1962	159,179.2	1,458.1	---	2,229,606.0	134,753.3	2,053,811.8	175,794.1
1963	164,334.9	3,034.0	---	2,396,974.9	100,079.4	2,153,891.2	243,083.7
1964	187,927.1	6,664.6	---	2,591,566.6	81,581.0	2,235,472.3	356,094.3
1965	181,154.7	11,304.2	8,131.5[c]	2,775,893.9	64,666.0	2,300,138.3	475,755.7
1966	178,441.2	15,941.7	26,100.0[c]	2,944,176.8	61,990.0	2,362,128.3	582,048.6
1967	161,241.0	20,120.3	28,800.0[c]	3,097,230.1	110,923.2	2,473,051.5	624,178.7
1968	127,967.4	22,199.5	84,860.6[c]	3,162,536.5	118,523.9	2,591,575.4	570,961.1
1969	125,969.1	25,026.4	---	3,313,532.0	109,506.0	2,701,081.3	612,450.7
1970	125,788.5	28,382.5	---	3,467,703.0	178,076.2	2,879,157.6	588,545.5
1971	128,120.4	24,797.4	---	3,620,620.8	359,659.3[d]	3,238,816.9	381,804.0

TABLE V-21. NUMBER OF WORK STOPPAGES IN MICHIGAN AND THE UNITED STATES, WORKERS INVOLVED, AND MAN-DAYS IDLE, BY INDUSTRY GROUP: 1979 (cont.)

(Workers and days idle in thousands)

	Michigan[a]			United States		
	Stoppages beginning in year		Man-days idle during year (all stoppages)	Stoppages beginning in year		Man-days idle during year (all stoppages)
Industry group	Number	Workers involved		Number	Workers involved	
Electrical machinery, equipment, and supplies	7	1.2	104.6	195	76.2	2,028.3
Transportation equipment	16	5.8	66.6	141	94.9	2,332.6
Professional, scientific, & controlling instruments; photographic and optical goods; watches and clocks	1	.4	76.6	26	5.8	249.1
Miscellaneous manufacturing industries	1	.1	25.0	57	10.0	202.4
Nonmanufacturing	196	65.2	796.7	2,536	1,046.5	14,462.4
Agriculture, forestry, and fisheries	2	b	.9	20	8.8	568.9
Mining	--	--	--	441	141.3	510.8
Contract construction	7	1.5	16.7	273	121.3	1,646.4
Transportation, communication, electric, gas, and sanitary services	22	11.3	129.2	376	387.3	5,642.7
Wholesale and retail trade	42	3.3	53.8	511	63.7	1,368.3
Finance, insurance, and real estate	2	(3)	1.1	26	3.1	71.5
Services	23	1.7	79.8	301	67.0	1,671.3
Government	98	47.4	515.1	593	254.1	2,982.5

SOURCE: Bureau of Labor Statistics, Analysis of Work Stoppages, 1979 (Washington, D.C.: 1981), Tables 6 and 230.

a. No work stoppages were recorded during 1974 for the industry groups for which no data are presented.
b. Fewer than 50.

TABLE V-22. EMPLOYMENT, PAYROLLS, AND AVERAGE WEEKLY EARNINGS IN MICHIGAN ESTABLISHMENTS COVERED UNDER THE REGULAR STATE UNEMPLOYMENT INSURANCE PROGRAM, BY INDUSTRY: 1979

Industry	Average employment[a]	Payrolls (000)	Average weekly earnings
Agriculture, forestry, and fisheries	17,914	$ 166,637	$ 178.89
Farms and agricultural services	17,470	163,188	179.64
Forestry and fisheries	444	3,449	149.37
Mining	15,529	286,597	407.38
Metal and coal mining	6,157	143,119	447.02
Crude petroleum and natural gas	3,645	69,315	365.70
Nonmetallic mining and quarrying	3,727	74,163	382.67
Construction	139,443	2,662,763	367.23
Building construction-general contractors	36,381	643,370	340.08
General contractors other than building	22,724	544,233	460.57
Construction-special trade contractors	80,338	1,475,161	353.11
Manufacturing	1,164,540	24,349,902	402.11
Foods and kindred products, and tobacco manufactures	52,014	857,327	316.60
Textile mill products	1,978	38,880	378.00
Apparel and other products	23,752	414,124	335.29
Lumber and wood products (except furniture)	13,707	162,704	224.99
Furniture and fixtures	23,718	389,338	315.68
Paper and allied products	23,361	425,125	349.76
Printing, publishing, and allied products	34,092	514,534	290.24
Chemicals and allied products	45,605	978,982	412.82
Petroleum refining and related industries	3,138	61,658	377.86
Rubber and misc. plastic products	37,677	555,058	283.31
Leather and leather products	3,511	40,058	219.41
Stone, clay, and glass products	21,543	415,406	370.82
Primary metal products	89,106	1,789,084	429.28
Fabricated metal products	139,372	2,578,658	355.81
Machinery (except electrical)	165,926	3,479,421	403.26
Electrical machinery, equipment, and supplies	54,409	415,406	361.77
Transportation equipment	407,472	10,093,937	474.06
Professional, scientific, and controlling instruments	13,216	204,314	297.30
Miscellaneous manufacturing industries	8,743	128,757	283.21
Transportation, communication, and utilities	144,557	2,799,312	372.40
Local railways and bus lines	4,415	41,789	182.03
Motor freight, transportation, and warehousing	47,173	947,843	386.24

TABLE V-22. EMPLOYMENT, PAYROLLS, AND AVERAGE WEEKLY EARNINGS IN MICHIGAN ESTABLISHMENTS COVERED UNDER THE REGULAR STATE UNEMPLOYMENT INSURANCE PROGRAM, BY INDUSTRY: 1979 (cont.)

Industry	Average employment[a]	Payrolls (000)	Average weekly earnings
Transportation (cont.)			
Water transportation	1,693	$ 28,502	$ 323.74
Transportation, other	13,101	217,745	319.62
Communication	42,324	805,475	365.98
Electric, gas, and sanitary services	35,831	757,957	405.80
Wholesale and retail trade	761,856	8,072,291	203.76
Wholesale trade	171,445	3,140,415	352.26
Retail building materials, hardware, and farm equipment	24,686	315,058	245.44
Retail general merchandise	90,759	807,668	171.56
Retail food	86,503	884,555	198.65
Retail automobile and gasoline service stations	71,177	230,907	251.51
Retail apparel and accessories	38,722	287,167	142.62
Retail furniture, home furnishings, and equipment	23,797	271,217	219.17
Eating and drinking places	189,927	888,806	87.97
Retail miscellaneous stores	64,829	544,500	161.52
Finance, insurance, and real estate	151,497	2,026,142	157.17
Credit agencies and banks	77,533	969,103	240.37
Insurance carriers	34,539	538,580	277.87
Insurance agents, brokers, & service	15,238	244,540	308.62
Real estate	22,815	247,507	210.31
Combined real estate, insurance, holding companies, and others	1,374	24,412	341.67
Services	567,788	6,832,549	231.42
Hotels, rooming houses, camps	26,143	156,646	115.23
Personal services	35,267	285,923	155,91
Business service, miscellaneous	93,350	1,053,224	216.77
Automobile repair, services, & garage	22,446	267,604	230.98
Miscellaneous repair services	10,842	154,717	274.43
Motion pictures	5,023	42,621	163.18
Amusement and recreation services, other	26,478	200,726	145.79
Medical and other health services	225,604	2,774,280	253.53
Legal services	15,074	276,060	277.71
Educational services	14,456	159,517	212.21
Social services	24,689	207,931	161.96
Museums	1,362	11,576	163.44
Nonprofit membership organizations	24,926	226,063	174.41
Private households	2,344	13,753	112.84
Miscellaneous services	39,784	777,899	376.99
TOTAL	2,961,126	47,196,194	306.51

SOURCE: Michigan Employment Security Commission, special release.

a. Average of 12 monthly figures.

TABLE V-23. EMPLOYMENT, PAYROLLS, AND AVERAGE WEEKLY EARNINGS IN MICHIGAN ESTABLISHMENTS COVERED UNDER THE REGULAR STATE UNEMPLOYMENT INSURANCE PROGRAM, BY COUNTY: 1978 AND 1979

County	1978			1979		
	Average employment[a]	Annual payrolls	Average weekly earnings	Average employment[a]	Annual payrolls	Average weekly earnings
Alcona	911	6,850,159	$ 144.60	882	7,813,834	$ 170.37
Alger	1,391	14,513,549	200.65	1,333	15,568,371	224.60
Allegan	13,420	146,914,255	210.53	13,830	166,243,938	231.74
Alpena	8,195	103,510,440	242.90	8,304	114,158,647	263.74
Antrim	2,932	28,899,239	189.55	3,097	33,846,074	210.17
Arenac	2,224	18,284,380	158.10	2,217	20,275,365	175.87
Baraga	1,611	16,023,699	191.28	1,575	17,030,355	207.94
Barry	5,888	72,903,634	238.11	6,080	81,359,924	257.34
Bay	28,656	379,076,426	254.39	28,515	404,321,135	272.68
Benzie	2,045	18,166,351	170.83	2,088	20,762,972	191.23
Berrien	54,948	678,832,347	237.58	54,222	721,284,827	255.82
Branch	10,268	115,511,851	216.34	10,193	122,475,742	231.07
Calhoun	46,470	639,950,463	264.83	46,121	690,113,826	287.75
Cass	8,489	96,132,809	217.78	7,693	92,608,293	231.50
Charlevoix	5,241	54,291,254	199.21	5,413	60,315,131	214.28
Cheboygan	4,396	44,453,277	194.47	4,748	52,158,227	211.26
Chippewa	4,567	41,490,266	174.71	4,107	40,613,856	190.17
Clare	3,467	28,594,853	158.61	3,515	31,082,695	170.06
Clinton	4,875	53,852,843	212.44	4,974	59,087,804	228.45
Crawford	1,873	16,934,651	173.87	1,719	14,396,323	161.05
Delta	8,617	100,939,473	225.27	8,566	109,879,927	246.57
Dickinson	7,761	93,641,112	232.03	7,903	106,938,757	260.22
Eaton	9,003	98,641,159	210.70	9,053	105,512,438	224.30
Emmet	7,114	73,753,852	199.37	7,198	83,194,852	222.27
Genesee	157,054	2,814,160,875	344.59	159,917	2,978,722,200	362.74

TABLE V-23. EMPLOYMENT, PAYROLLS, AND AVERAGE WEEKLY EARNINGS IN MICHIGAN ESTABLISHMENTS COVERED UNDER THE REGULAR STATE UNEMPLOYMENT INSURANCE PROGRAM, BY COUNTY: 1978 AND 1979 (cont.)

County	1978			1979		
	Average employment[a]	Annual payrolls	Average weekly earnings	Average employment[a]	Annual payrolls	Average weekly earnings
Gladwin	2,039	18,384,471	$ 173.39	2,033	20,752,165	$ 196.30
Gogebic	3,514	28,227,328	154.48	3,622	31,010,924	164.65
Grand Traverse	18,972	198,073,910	200.78	20,407	230,393,771	217.11
Gratiot	9,875	111,993,853	218.10	9,852	117,934,415	230.20
Hillsdale	8,894	101,371,720	219.19	8,378	106,525,596	244.52
Houghton	6,228	56,595,857	174.76	6,128	61,965,834	193.61
Huron	6,417	71,173,024	213.29	6,783	80,029,362	226.89
Ingham	100,185	1,436,211,425	275.68	104,599	1,624,934,281	298.75
Ionia	9,269	101,026,783	209.60	8,773	101,267,595	221.98
Iosco	4,048	38,873,828	184.68	4,171	42,689,822	196.83
Iron	2,347	18,655,653	152.86	2,369	20,218,005	164.12
Isabella	8,537	85,712,020	193.08	8,686	97,475,448	215.81
Jackson	43,997	606,098,435	264.92	44,341	662,873,961	287.49
Kalamazoo	75,582	998,465,278	254.04	78,284	1,138,598,801	279.70
Kalkaska	1,713	24,090,881	270.45	1,928	27,278,114	272.08
Kent	177,664	2,242,179,829	242.70	188,696	2,623,048,640	267.33
Keweenaw	181	1,355,047	143.97	164	1,308,451	153.43
Lake	490	3,414,382	134.00	491	3,499,210	137.05
Lapeer	9,624	101,287,088	202.39	9,022	105,343,046	224.54
Leelanau	1,724	12,733,154	142.04	1,718	13,520,209	151.34
Lenawee	23,284	291,632,393	240.87	23,810	322,132,537	260.18
Livingston	12,495	134,707,090	207.32	13,735	160,716,266	225.02
Luce	826	6,588,127	153.38	789	6,379,537	155.49
Mackinac	2,116	17,437,746	158.48	2,107	19,007,965	173.49
Macomb	197,516	3,214,002,347	312.93	200,683	3,408,371,564	326.61

TABLE V-23. EMPLOYMENT, PAYROLLS, AND AVERAGE WEEKLY EARNINGS IN MICHIGAN ESTABLISHMENTS COVERED UNDER THE REGULAR STATE UNEMPLOYMENT INSURANCE PROGRAM, BY COUNTY: 1978 AND 1979 (cont.)

	1978			1979		
County	Average employment[a]	Annual payrolls	Average weekly earnings	Average employment[a]	Annual payrolls	Average weekly earnings
Manistee	5,420	63,421,892	$ 225.03	5,393	69,353,297	$ 247.31
Marquette	17,553	213,498,923	233.91	17,624	263,244,193	257.78
Mason	6,115	62,779,641	197.43	6,250	71,417,591	219.75
Mecosta	4,228	36,469,563	165.88	4,299	39,460,243	176.52
Menominee	5,739	57,387,895	192.30	5,809	63,678,945	210.81
Midland	26,803	466,600,051	334.78	27,074	525,548,234	373.30
Missaukee	781	6,761,273	166.48	849	8,373,508	189.67
Monroe	20,783	295,148,355	273.10	20,611	313,065,604	292.10
Montcalm	10,301	109,975,852	205.31	9,720	112,353,700	222.29
Montmorency	1,335	9,858,340	142.01	1,243	9,873,839	152.76
Muskegon	47,816	628,342,104	252.71	48,650	963,606,671	274.17
Newaygo	5,033	50,206,796	191.84	4,925	54,779,314	213.90
Oakland	361,409	5,394,099,325	287.02	380,268	6,214,233,781	314.26
Oceana	2,506	20,128,911	154.47	2,685	24,491,448	175.55
Ogemaw	2,624	24,758,614	181.45	2,863	29,097,817	195.45
Ontonagon	2,434	32,175,859	254.22	2,382	35,377,077	295.61
Osceola	2,976	31,898,293	206.13	2,943	35,140,070	229.62
Oscoda	602	4,559,015	145.64	587	4,756,367	155.82
Otsego	4,346	43,698,300	193.36	4,793	51,381,889	206.16
Ottawa	47,650	548,723,706	221.46	49,826	635,679,238	245.35
Presque Isle	2,157	26,233,682	233.89	2,113	29,458,389	268.11
Roscommon	2,218	16,932,693	146.81	2,329	18,891,825	155.99
Saginaw	75,822	1,219,250,432	309.24	76,937	1,302,683,336	325.61
Sanilac	6,852	73,961,751	207.58	6,590	75,985,290	221.74
Schoolcraft	1,635	16,910,122	198.90	1,573	18,281,110	223.50

TABLE V-21. NUMBER OF WORK STOPPAGES IN MICHIGAN AND THE UNITED STATES, WORKERS INVOLVED, AND MAN-DAYS IDLE, BY INDUSTRY GROUP: 1979

(Workers and days idle in thousands)

Industry group	Michigan[a]			United States		
	Stoppages beginning in year		Man-days idle during year (all stoppages)	Stoppages beginning in year		Man-days idle during year (all stoppages)
	Number	Workers involved		Number	Workers involved	
All industries	349	90.7	1,592.5	4,827	1,727.1	34,753.7
Manufacturing	153	25.4	795.8	2,296	680.6	20,291.4
Ordnance and accessories	--	--	--	2	2.6	175.0
Food and kindred products	13	2.2	32.6	178	40.6	968.7
Tobacco manufactures	--	--	--	2	.1	.5
Textile mill products	--	--	--	30	4.8	193.8
Apparel and other finished products made from fabrics and similar materials	1	.2	4.0	55	10.5	230.1
Lumber & wood products, except furniture	2	.5	25.7	60	14.5	288.7
Furniture and fixtures	6	.5	6.4	74	13.0	272.0
Paper and allied products	5	.4	8.4	110	21.4	1,135.3
Printing, publishing, & allied products	--	--	3.1	39	10.7	216.5
Chemicals and allied products	9	.9	92.3	143	22.2	1,172.2
Petroleum refining & related industries	2	(3)	.7	33	12.4	259.8
Rubber & miscellaneous plastics products	11	2.6	91.1	112	28.1	767.9
Leather and leather products	1	.3	11.7	17	4.8	163.3
Stone, clay, and glass products	5	.9	22.6	163	28.6	573.7
Primary metal industries	16	2.8	123.8	202	49.9	1,480.8
Fabricated metal products, except ordnance, machinery, and transportation equipment	27	2.9	99.8	352	56.1	1,962.6
Machinery, except electrical	30	3.6	--	316	173.5	5,618.1

TABLE V-23. EMPLOYMENT, PAYROLLS, AND AVERAGE WEEKLY EARNINGS IN MICHIGAN ESTABLISHMENTS COVERED UNDER THE REGULAR STATE UNEMPLOYMENT INSURANCE PROGRAM, BY COUNTY: 1978 AND 1979 (cont.)

	1978			1979		
County	Average employment[a]	Annual payrolls	Average weekly earnings	Average employment[a]	Annual payrolls	Average weekly earnings
Shiawassee	11,692	129,423,131	$ 212.87	12,350	150,270,608	$ 233.99
St. Clair	27,240	344,301,756	243.07	26,470	363,236,269	263.90
St. Joseph	15,376	179,871,475	224.97	15,508	200,706,932	248.89
Tuscola	7,879	88,439,494	215.86	7,933	95,978,648	232.67
Van Buren	11,115	117,945,842	204.07	11,609	136,656,556	286.38
Washtenaw	91,633	1,465,617,528	307.59	96,023	1,637,011,892	327.85
Wayne	892,579	14,986,800,652	322.89	878,922	15,818,671,897	346.11
Wexford	6,868	70,518,405	197.46	7,130	78,644,404	212.12
State-wide	66,188	837,033,995	243.20	63,995	865,003,210	259.94
TOTAL	2,924,664	43,350,348,552	285.04	2,961,126	47,196,194,224	206.51

SOURCE: Michigan Employment Security Commission, special release.

a. Average of 12 monthly figures.

TABLE V-24. CETA (COMPREHENSIVE EMPLOYMENT AND TRAINING ACT) PARTICIPANT SUMMARY, FISCAL YEARS: 1979 AND 1980

		Percentage of total			
Characteristic	Year	Total titles II B/C IID & VI	Total youth programs	Special CETA programs	Statewide aggregate for all CETA programs
Sex					
Male	1979	50	52	77	53
	1980	51	52	70	53
Female	1979	50	48	23	47
	1980	49	48	30	47
Age					
21 and under	1979	35	100	32	53
	1980	44	100	33	61
22-54	1979	62	(a)	65	45
	1980	54	(a)	64	37
55 and older	1979	3	(a)	3	2
	1980	2	(a)	3	2
Education					
High school student	1979	12	78	10	30
	1980	18	79	9	36
High school dropout	1979	22	11	54	21
	1980	24	9	52	22
High school graduate or equivalent	1979	44	8	28	33
	1980	41	8	30	29
Post high school	1979	22	3	8	16
	1980	17	4	9	13
Economic status					
Receiving public assistance	1979	30	55	14	36
	1980	39	51	20	41
Economically disadvantaged	1979	83	96	91	87
	1980	95	96	96	95
Ethnic group					
White	1979	62	43	36	55
	1980	60	47	36	53
Black	1979	33	52	16	37
	1980	35	48	16	38
Hispanic	1979	3	4	39	6
	1980	3	3	37	6
American Indian or Alaskan native	1979	1	1	9	2
	1980	1	1	11	2
Asian or Pacific islander	1979	1	(a)	(a)	(a)
	1980	1	1	(a)	1
Other characteristics					
Total veterans	1979	14	(a)	18	10
	1980	10	(a)	15	7
Handicapped	1979	6	4	5	5
	1980	8	8	6	8
Offender	1979	9	5	20	8
	1980	11	4	9	9
Total participants (number)	1979	106,934	54,932	12,852	174,718
	1980	109,665	60,182	16,684	186,531

SOURCE: Michigan Department of Labor, Bureau of Employment and Training, _1980 Report to the Governor_ (Lansing: 1981), Appendix B: and a similar document for the previous year

a. Less than 1%.

TABLE V-25. AVERAGE (MEAN) HOURLY EARNINGS IN SELECTED MICHIGAN AREAS, BY SELECTED OCCUPATION: 1980 or 1981

Occupation	Alpena, Standish, and Tawas City (July)	Ann Arbor (October)	Battle Creek[a] (March)	Detroit (March)	Saginaw (November)	Upper Peninsula (June)
Secretaries						
Class A	$ n.a.	$ 9.64	$ 7.79	$ 9.85	$ n.a.	$ n.a.
Class B	n.a.	8.22	8.75	9.78	n.a.	6.23
Class C	7.51	7.53	9.07	8.64	n.a.	5.41
Class D	n.a.	8.02	9.58	7.49	8.98	4.80
Class E	n.a.	5.58	n.a.	5.89	7.13	n.a.
Total	7.52	7.50	8.98	8.53	8.93	5.42
Stenographers	7.56	6.69	7.93	7.63	6.71	n.a.
Typists						
Class A	n.a.	6.69	4.70	7.25	n.a.	n.a.
Class B	7.40	4.70	n.a.	4.61	n.a.	n.a.
Total	7.40	5.38	4.84	5.43	5.03	n.a.
File clerks						
Class A	n.a.	n.a.	4.84	n.a.	n.a.	n.a.
Class B	n.a.	n.a.	6.36	4.82	n.a.	n.a.
Class C	n.a.	4.12	n.a.	3.96	3.91	n.a.
Total	n.a.	4.29	4.89	4.20	3.98	n.a.
Switchboard operators	n.a.	6.33	6.20	5.65	4.98	n.a.
Keypunch operators						
Class A	7.32	7.70	6.21	6.89	n.a.	8.31
Class B	n.a.	4.95	n.a.	5.28	6.32	4.95
Total	6.32	5.68	6.80	5.79	7.05	6.24
Computer operators						
Class A	n.a.	11.03	6.97	9.49	n.a.	9.40
Class B	n.a.	7.73	7.39	7.97	8.86	6.31
Class	n.a.	8.56	10.27	8.11	n.a.	n.a.
Total	n.a.	8.34	8.01	8.32	8.35	6.12
Drafters						
Class A	n.a.	11.34	n.a.	13.31	n.a.	n.a.
Class B	n.a.	8.96	n.a.	10.08	9.52	7.47
Class C	n.a.	7.65	8.52	8.17	7.48	6.54
Class D	n.a.	6.18	9.81	6.95	n.a.	n.a.
Class E	n.a.	5.03	11.14	n.a.	n.a.	n.a.
Tracers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total	n.a.	8.97	9.43	10.61	9.47	6.92
Electronics technicians						
Class A	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Class B	n.a.	n.a.	n.a.	9.84	n.a.	n.a.
Class C	n.a.	n.a.	n.a.	n.a.	n.a.	
Total	n.a.	n.a.	11.22	10.52	n.a.	n.a.

TABLE V-25. AVERAGE (MEAN) HOURLY EARNINGS IN SELECTED MICHIGAN AREAS, BY SELECTED OCCUPATION: 1980 or 1981 (cont.)

Occupation	Alpena, Standish, and Tawas City (July)	Ann Arbor (October)	Battle Creek[a] (March)	Detroit (March)	Saginaw (November)	Upper Peninsula (June)
Mntn. carpenters	$ n.a.	$ n.a.	$ n.a.	$10.91	$ n.a.	$ 8.99
Mntn. electricians	8.77	12.30	11.30	11.36	n.a.	9.08
Mntn. painters	n.a.	n.a.	11.39	10.95	n.a.	n.a.
Mntn. machinists	n.a.	11.54	n.a.	11.00	n.a.	9.20
Mntn. mechanics						
Machinery	8.92	n.a.	10.96	10.98	n.a.	8.66
Motor vehicle	9.17	11.87	11.24	10.75	n.a.	8.98
Mntn. pipefitters	n.a.	n.a.	11.44	11.19	n.a.	9.32
Mntn. sheet-metal workers	n.a.	n.a.	n.a.	11.15	n.a.	n.a.
Millwrights	n.a.	n.a.	n.a.	11.27	n.a.	n.a.
Mntn. trade helpers	n.a.	n.a.	n.a.	9.49	n.a.	n.a.
Machine tool operators (toolroom)	n.a.	n.a.	n.a.	11.29	n.a.	n.a.
Tool and die makers	n.a.	12.03	11.20	11.33	n.a.	9.42
Stationary engineers	n.a.	12.29	10.16	11.27	n.a.	n.a.
Boiler tenders	n.a.	n.a.	10.12	9.33	n.a.	6.20
Truck drivers						
Light truck	n.a.	n.a.	n.a.	7.27	n.a.	n.a.
Medium truck	n.a.	7.13	n.a.	8.37	9.91	n.a.
Heavy truck	n.a.	n.a.	6.07	9.82	n.a.	n.a.
Tractor trailer	9.08	n.a.	10.14	10.28	10.11	9.86
Total	8.79	n.a.	9.75	9.33	9.90	8.12
Shipping clerks	n.a.	n.a.	n.a.	9.32	n.a.	n.a.
Receiving clerks	n.a.	n.a.	n.a.	8.49	7.46	n.a.
Warehousemen	n.a.	n.a.	n.a.	8.14	7.38	n.a.
Order fillers	n.a.	n.a.	n.a.	8.54	n.a.	n.a.
Shipping packers	6.97	8.53	7.97	8.31	n.a.	5.49
Mtl. handling laborers	6.53	6.89	8.98	9.05	9.39	6.14
Forklift operators	7.23	10.04	9.59	9.37	n.a.	6.49
Guards	8.92	6.63	7.36	7.00	n.a.	6.32
Janitors, porters, and cleaners	n.a.	7.55	7.88	6.41	8.80	5.85

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, Area Wage Survey, Detroit, Michigan, Metropolitan Area, March 1980 (Washington, D.C.: July 1980); Area Wage Survey, Saginaw, Michigan, Metropolitan Area, November 1980 (Washington, D.C.: February 1981); Area Wage Survey, Upper Peninsula, Michigan, June 1980 (Chicago, Illinois: September 1980, Table 1; Area Wage Survey, Alpena-Standish-Tawas City, Michigan, July 1980 (Chicago, Illinois: November 1980, Table 1; Area Wage Survey, Battle Creek, Michigan, March 1981 (Chicago, Illinois: June 1981), Table 1; and Area Wage Survey, Ann Arbor, Michigan, October 1980 (Chicago, Illinois: January 1981), Table 1.

TABLE V-26. ESTIMATES OF WORKMEN'S COMPENSATION PAYMENTS IN MICHIGAN, BY TYPE OF INSURANCE: 1968-1978

(In thousands of dollars)

Year	Insurance losses paid by private insurance carriers	State and federal fund disbursements	Self-insurance payments	Total
1968	80,602	5,691	51,345	137,638
1969	94,226	6,420	59,885	160,531
1970	105,090	6,646	66,485	178,221
1971	119,700	8,033	76,000	203,733
1972	140,677	8,362	93,745	242,784
1973	158,141	9,759	105,620	273,530
1974	180,536	10,845	120,400	311,781
1975	193,410	11,500	128,800	333,710
1976	222,754	16,975	151,000	390,729
1977	252,569	14,116	168,000	434,685
1978	270,700	20,437	205,850	496,987

SOURCE: Social Security Administration, Social Security Bulletin, January 1966 through January 1977 (Washington, D.C.: monthly), vol. 40, no. 1 (January 1977): 35, vol. 41, no. 3 (March 1978): 33, and vol. 42, no. 10 (October 1979): 20 (October 1980): 8.

TABLE V-27. NUMBER OF MINERS, MINERS' WIDOWS, AND MINERS' DEPENDENTS RECEIVING BLACK LUNG BENEFITS, AND MONTHLY AMOUNT, MICHIGAN AND THE UNITED STATES: DECEMBER 1974-1979

	Number			Monthly amount ($000)	
Year	Miners	Widows	Dependents	Miners	Widows
		Michigan			
1974	1,839	2,063	1,842	496.0	401.0
1975	1,740	2,139	1,775	497.0	439.0
1976	1,655	2,210	1,602	491.0	472.0
1977	1,531	2,273	1,506	485.0	521.0
1978	1,399	2,279	1,456	470.0	553.0
1979	1,295	2,276	1,292	473.0	595.0
		United States			
1974	169,097	134,700	183,419	45,100.0	26,400.0
1975	165,405	139,407	177,409	46,600.0	28,900.0
1976	158,087	142,495	169,073	46,500.0	30,800.0
1977	148,720	144,543	164,136	47,100.0	33,400.0
1978	138,648	145,829	155,493	46,800.0	35,500.0
1979	129,558	146,527	142,863	47,800.0	38,700.0

SOURCE: Social Security Administration, Social Security Bulletin, June 1974 through June 1979 (Washington, D.C.: monthly), vol. 42, no. 6 (June 1979): Table Q-33.

The following comments are excerpts from a mimeographed description of the personal income statistics issued by the Bureau of Economic Analysis, an agency within the U.S. Department of Commerce.

> BEA's personal income estimates are unique in that they provide its users with an economic base profile, extending over a span of more than forty years and covering more than three-thousand sub-areas, which can be combined into any multicounty geographic area needed. That is, it covers the Nation county-by-county; it is prepared annually, and it is presented in substantial industrial detail.
>
> Because of its conceptual scope and its richness of component detail, personal income can be used to measure and trace the levels and types of income flows received or earned by individuals residing or working in a specific political subdivision or micro-economy. Thus, it provides a local area data base for economic decision-making and for the implementation of those Federal, State or local government programs requiring an analysis of economic activities in, or the economic well-being of the residents of, a particular area. Specific applications include its use as a measure of the size of the consumer market; as an indirect measure of the industrial market; as a measure of the quality of a market and the economic welfare of an area's residents; as an indicator of an area's economic health; as an analytical framework which can be used in assessing an area's economy and against which alternative developmental programs can be evaluated or as a basis for gauging the capacity of an area to support public service expenditures.
>
> Personal income is the sum of several hundred individually estimated component flows, both monetary and non-monetary, and it encompasses most forms of income flowing to persons including Federal, State and local governments, households, institutions, and foreign governments.
>
> Two of the most important characteristics of the county income estimates are that they are constructed from a wide variety of statistical information not necessarily designed for income estimation; (this information consists mainly of data obtained from business and government records showing disbursements to individuals) and the BEA national and State estimates of personal income are used as statistical "frames of reference." Thus State totals are allocated to the counties on the basis of the best available data. A detailed procedure of estimation is followed to maximize reliability and to obtain analytically useful information by county on income by type and by industry. This use of extensive detail is the hallmark of a reliable measurement effort because it reflects, with reasonable reliability, the interindustry or intercomponent differentials at both the State and county levels, and it provides the detail needed to audit the sources and methods of estimation. This approach has an

added virtue in that it gives us the opportunity to take maximum advantage of the benevolent "law" of offsetting error.

It should also be emphasized that while the BEA estimates of county personal income and employment incorporate a great deal of basic data which may be presumed, from their general characteristics, to be "reliable," it also uses other data of differing quality, scope and relevance. In order to bridge the gaps or deficiencies in the poorer quality statistical source materials available for county income estimation, resort must be made to assumptions and indirect procedures.

Reliance on indirect methods and procedures makes it impossible to specify error in formal probabilistic or statistical terms. The importance of this limitation is increased by two circumstances; (a) the extent of indirect methods varies considerably over the forty-year estimating span, and (b) the industry structures of States and counties are differentially sensitive to such methods.

Personal Income Defined

Personal income is the current income of residents of an area from all sources. It is measured after deduction of personal contributions to social security, government retirement, and other social insurance programs but before deduction of income and other personal taxes. It includes income received from business, Federal and State and local governments, households and institutions, and foreign governments. It consists of wages and salaries (in cash and in kind, including tips and bonuses as well as contractual compensation), various types of supplementary earnings termed other labor income (the largest item being employer contributions to private pension, health and welfare funds), the net incomes of owners of unincorporated businesses (farm and nonfarm with the latter including the incomes of independent professionals), net rental income, royalties, dividends, interest, and government and business transfer payments (consisting in general of disbursements to persons for which no services are rendered currently, such as unemployment benefits, social security payments, medicare benefits, retirement pay of governmental programs, and welfare and relief payments).

To measure personal income on a local area basis, criteria for allocating income to counties or SMSA's must be established. In the case of labor and entrepreneurial income, the criteria can be either the place-of-work of the income recipient or his place-of-residence. The difference between the two concepts is the net flow of commuters' earnings.

In BEA's local area income series, personal income is measured on a where-received (i.e., place-of-residence) basis; however, the bulk of the estimates of earnings[1] by broad industrial source are on a where-earned basis.

---

[1] Earnings are the sum of wages and salaries, other labor income, and self-employment income.

> Earnings on a residence basis equals earnings on a place-of-work basis minus the earnings of persons who work in the given area but reside in another area, plus the earnings of persons who reside in the given area but work in another area.
>
> Both measures of local area earnings are required. In the first construct, earnings, designated as "where-earned," are estimated by industry by place-of-work to provide a basis for the analysis of the industrial structure of a given area. In the second construct, designated as "where-received," earnings (where-earned) are adjusted to reflect place-of-residence which together with the other components of total personal income yields a useful basis for the analysis of consumer markets and purchasing power. When expressed on a per capita basis, the total personal income is an indicator of the economic well-being of the residents of a sub-area.
>
> This adjustment to a place-of-residence is made to the all-industry earnings total for each county. A more precise method would be to convert the place-of-work earnings to a place-of-residence by computing adjustment factors for each major industry group, thus reflecting industrial differentials in commuting flows. There is, however, little likelihood that the industrial detail needed to carry out such a procedure will be forthcoming in the near future.
>
> The distinction between place-of-work and residence cannot be applied to the other components of the income flow -- property income and transfer payments. In the case of property income an alternative criterion, resembling the place-of-work concept, is possible, i.e., the allocation of these incomes to the areas in which the businesses that generated them are located. However, conceptual and statistical difficulties that have not been satisfactorily resolved stand in the way of the application of this criterion. And even if these difficulties did not exist, it would not be advisable to apply the criterion to the property income component of personal income, since the latter cannot be transformed into a satisfactory measure of the contribution of capital to production, mainly because it excludes all components of profits other than dividends.

Readers of the Abstract who require additional detail of personal income for Michigan or its subdivisions than that published in this chapter are invited to contact the Bureau of Business Research, School of Business Adminstration, Wayne State University, which is a respository for these statistics.

Selected detail of transfer payments appears in Table VII-2. The personal income earnings components for industries were used as measures of the economic importance of government (Chapter X), agriculture (Chapter XII), construction (Chapter XIV), manufacturing (Chapter XV), trade (Chapters XX and XXI), finance, insurance, and real estate (Chapter XXI) and services (Chapter XXIII).

The poverty threshold is developed by the Bureau of the Census as a multiple of the income needed to purchase an "economy" diet, one that just meets minimum standards of nutrition and diversity. Government studies have shown that for households with three or more individuals, the multiple is three, that is, one-third of the budget goes for food. In two-person households, food absorbs 27 percent of the minimum adequate budget, and for single individuals the ratio is even smaller. Detroit area proverty data appear in Table VI-18.

Consumer price indexes are compiled by the Bureau of Labor Statistics. Essentially, these represent the change in the cost of purchasing a fixed market basket of goods and services. CPIs are calculated for a selection of cities in the country, including Detroit. The national index is produced separately on the basis of average prices of individual items nationally.

Cost of living comparisons may be made through family budget studies conducted by the Bureau of Labor Statistics (Tables VI-21 and VI-22). The moderate family budget allows for "the maintenance of health and social well-being, the nurture of children, and participation in community activities."

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TABLE VI-1. TOTAL AND PER CAPITA PERSONAL INCOME IN MICHIGAN AND THE UNITED STATES: 1948-1980

	Total income (millions of dollars)			Per capita income (dollars)		
Year	Michigan	United States	Percentage[a]	Michigan	United States	Percentage[a]
1948	9,691	208,876	4.64	1,560	1,430	109.1
1949	9,627	205,793	4.68	1,520	1,384	109.8
1950	10,915	226,197	4.83	1,704	1,496	113.9
1951	12,176	253,232	4.81	1,874	1,652	113.4
1952	13,050	269,769	4.84	1,962	1,733	113.2
1953	14,741	285,456	5.16	2,161	1,804	119.8
1954	14,354	287,607	4.99	2,031	1,785	113.8
1955	15,900	308,266	5.16	2,183	1,876	116.4
1956	16,529	330,479	5.00	2,214	1,975	112.1
1957	16,870	348,460	4.84	2,229	2,045	109.0
1958	16,520	356,939	4.63	2,155	2,050	105.1
1959	17,520	380,016	4.61	2,256	2,145	105.2
1960	18,225	396,086	4.60	2,326	2,201	105.7
1961	18,169	411,301	4.42	2,302	2,248	102.4
1962	19,450	436,894	4.45	2,452	2,353	104.2
1963	20,770	459,075	4.52	2,578	2,436	105.8
1964	22,768	491,341	4.63	2,781	2,572	108.1
1965	25,386	532,022	4.77	3,038	2,750	110.5
1966	27,723	579,158	4.79	3,257	2,963	109.9
1967	29,046	620,020	4.68	3,366	3,142	107.1
1968	32,097	677,786	4.74	3,691	3,401	108.5
1969[b]	34,862	747,536	4.66	3,970	3,714	106.9
1970[b]	35,975	803,922	4.47	4,044	3,945	102.5
1971[b]	39,068	861,904	4.53	4,355	4,167	104.5
1972[b]	43,282	944,852	4.58	4,796	4,515	106.2
1973[b]	48,383	1,058,902	4.57	5,333	5,010	106.4
1974[b]	51,750	1,162,203	4.45	5,681	5,448	104.3
1975[b]	54,559	1,259,430	4.33	5,990	5,845	102.5
1976[b]	61,333	1,386,772	4.42	6,727	6,374	105.5
1977[b]	69,237	1,533,768	4.51	7,561	6,979	108.3
1978[b]	77,567	1,717,816	4.52	8,429	7,735	109.0
1979[b]	86,414	1,939,486	4.46	9,343	8,637	108.2
1980[b]	92,339	2,162,936	4.27	9,950	9,521	104.5

SOURCE: Bureau of Economic Analysis, Regional Economics Information System; and U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business (Washington, D.C.: Monthly), July 1981, Vol. 61, Table 3 and p. 29.

a. Michigan as a percentage of the United States.

b. Estimates for 1969-1980 have been revised to reflect the 1980 comprehensive NIPA revision.

TABLE VI-2. TOTAL AND PER CAPITA DISPOSABLE PERSONAL INCOME IN MICHIGAN AND THE UNITED STATES: 1967-1979.

	Total income (Millions of dollars)			Per capita income (dollars)		
Year	Michigan	United States	Percentage	Michigan	United States	Percentage
1967	25,261	538,597	4.7	2,927	2,729	107.3
1968	27,359	581,507	4.7	3,146	2,918	107.8
1969	29,063	628,756	4.6	3,310	3,099	106.8
1970	30,473	678,819	4.5	3,425	3,331	102.8
1971	33,539	736,374	4.6	3,741	3,571	104.7
1972	36,419	794,991	4.6	4,029	3,818	105.5
1973	40,982	895,284	4.6	4,516	4,266	105.8
1974	44,072	977,782	4.5	4,834	4,626	104.4
1975	47,174	1,080,455	4.4	5,178	5,072	102
1976	52,270	1,177,837	4.4	5,736	5,487	104.5
1977	58,354	1,298,225	4.5	6,379	6,000	106.3
1978	65,425	1,456,137	4.4	7,126	6,673	106.8
1979	72,017	1,628,442	4.4	7,822	7,399	105.7

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

TABLE VI-3. FUNCTIONAL COMPONENTS OF INCOME IN MICHIGAN AND THE UNITED STATES: 1975-1980[a]

(Dollar figures in thousands)

	1975	1976	1977	1978	1979	1980
Labor and proprietors' earnings, by place of work[b,c,d]						
Michigan	42,062,128	48,062,123	54,967,085	62,176,408	68,241,355	69,385,048
United States	955,431,000	1,055,464,000	1,172,112,000	1,320,564,000	1,481,951,000	1,614,002,000
Percentage[e]	4.4	4.6	4.7	4.7	4.6	4.3
Social insurance contributions						
Michigan	2,120,758	2,383,314	2,571,328	2,922,734	3,293,590	3,606,079
United States	50,118,000	55,149,000	60,739,000	69,244,000	80,181,000	87,370,000
Percentage[e]	4.2	4.3	4.2	4.2	4.1	4.1
Residence adjustment						
Michigan	227,896	284,021	326,282	375,028	408,267	434,795
United States[f]	-336,000	-358,000	-402,000	-441,000	-436,000	-439,000
Percentage[e]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Net labor and proprietors' earnings, by place of residence						
Michigan	40,169,266	45,962,830	52,722,039	59,628,702	65,356,032	66,213,764
United States	905,313,000	1,000,315,000	1,111,373,000	1,251,320,000	1,401,770,000	1,526,632,000
Percentage[e]	4.4	4.6	4.7	4.8	4.7	4.3
Dividends, interest, and rent[g]						
Michigan	6,553,592	7,239,620	8,093,374	9,084,802	10,888,556	12,866,849
United States	176,145,000	192,542,000	215,325,000	243,665,000	288,760,000	342,503,000
Percentage[e]	3.7	3.8	3.8	3.7	3.8	3.8

TABLE VI-4. ANALYSIS OF THE LABOR AND PROPRIETORS' EARNINGS COMPONENT OF PERSONAL INCOME, BY INDUSTRIAL SECTOR, IN MICHIGAN AND THE UNITED STATES: 1975-1980[a]

Sector	Earnings, 1980		Percentage change	
	Millions of dollars	Percentage	1975 to 1980	1979 to 1980
	Michigan			
Manufacturing	27,888	28.67	67	-4
Nondurable goods	4,495	4.62	59	1
Durable goods	23,395	24.05	69	-4
Services	10,951	11.26	83	12
Retail trade	6,253	6.43	49	3
Transportation and public utilities	3,999	4.11	71	4
Wholesale trade	3,768	3.87	58	4
Contract construction	3,037	3.12	61	-11
Finance, insurance and real estate	2,991	3.07	92	10
Farm	650	0.67	1	-18
Mining	357	0.37	49	3
Agricultural services, forestry, fisheries, and other[b]	180	0.19	98	7
State and local government[a]	7,954	8.18	56	10
Federal, civilian	1,161	1.19	43	8
Federal, military	196	0.20	-1	6
TOTAL	97,275	100.00	66	4
	United States			
Manufacturing	417,779	20.56	73	7
Nondurable goods	146,111	7.19	64	9
Durable goods	269,668	13.27	78	7
Services	285,270	14.04	84	14
Retail trade	156,131	7.68	59	7
Transportation and public utilities	124,498	6.13	77	10
Wholesale trade	111,237	5.47	74	12
Contract construction	93,685	4.61	69	3
Finance, insurance and real estate	97,941	4.82	98	14
Farm	31,980	1.57	3	-20
Mining	28,860	1.42	112	20
Agricultural services, forestry, fisheries, and other[b]	7,074	0.35	94	11
State and local government[c]	177,147	8.72	55	11
Federal, civilian	60,894	3.00	45	8
Federal, military	23,506	1.16	31	9
TOTAL	2,031,781	99.99[d]	70	86

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

a. Estimates based on 1972 standard industrial classification.

b. Includes wages and salaries of U.S. residents working for international organizations in the U.S.

c. Includes publicly controlled institutions of education and other educational institutions.

d. Error due to rounding.

TABLE VI-6. QUARTERLY PERSONAL INCOME IN MICHIGAN AND THE UNITED STATES, SEASONALLY ADJUSTED ANNUAL RATES: 1949-1980

(In millions of dollars)

Year and quarter	Michigan	United States	Year and quarter	Michigan	United States
1949			1957		
First	9,728	207,250	First	17,015	343,063
Second	9,530	205,701	Second	16,822	347,383
Third	9,790	204,660	Third	16,866	351,859
Fourth	9,461	205,562	Fourth	16,775	351,534
1950			1958		
First	10,043	219,377	First	16,403	350,598
Second	10,548	219,722	Second	16,182	352,220
Third	11,330	228,425	Third	16,790	358,997
Fourth	11,660	237,331	Fourth	16,707	365,938
1951			1959		
First	11,967	245,204	First	17,058	371,656
Second	12,233	252,077	Second	17,676	380,075
Third	12,200	255,254	Third	17,677	381,504
Fourth	12,303	260,394	Fourth	17,667	386,819
1952			1960		
First	12,574	262,155	First	18,325	391,283
Second	12,721	265,767	Second	18,270	396,358
Third	12,925	272,731	Third	18,262	397,958
Fourth	13,980	278,424	Fourth	18,045	398,746
1953			1961		
First	14,566	282,287	First	17,687	401,934
Second	14,840	286,310	Second	18,083	407,681
Third	14,882	286,578	Third	18,228	413,883
Fourth	14,677	286,648	Fourth	18,679	421,706
1954			1962		
First	14,291	285,494	First	18,897	427,936
Second	14,392	284,702	Second	19,313	435,195
Third	14,089	287,311	Third	19,595	439,672
Fourth	14,642	292,922	Fourth	19,997	444,773
1955			1963		
First	15,249	297,773	First	20,201	450,338
Second	15,848	305,088	Second	20,419	455,075
Third	16,085	312,400	Third	20,857	461,547
Fourth	16,417	317,802	Fourth	21,602	469,339
1956			1964		
First	16,225	322,244	First	22,022	478,015
Second	16,264	327,793	Second	22,575	487,146
Third	16,510	332,324	Third	23,161	496,151
Fourth	17,116	339,554	Fourth	23,316	504,052

TABLE VI-6. QUARTERLY PERSONAL INCOME IN MICHIGAN AND THE UNITED STATES, SEASONALLY ADJUSTED ANNUAL RATES: 1949-1980 (cont.)

(In millions of dollars)

Year and quarter	Michigan	United States	Year and quarter	Michigan	United States
1965			1973		
First	24,338	514,523	First	47,108	1,004,828
Second	25,056	524,704	Second	48,114	1,031,131
Third	25,471	538,353	Third	50,305	1,066,790
Fourth	26,681	550,507	Fourth	51,826	1,099,630
1966			1974		
First	26,815	562,317	First	51,300	1,107,391
Second	27,375	572,752	Second	52,539	1,137,933
Third	28,078	585,057	Third	54,858	1,171,724
Fourth	28,624	596,505	Fourth	55,277	1,189,836
1967			1975		
First	28,466	605,965	First	52,212	1,197,357
Second	28,747	613,279	Second	53,565	1,230,670
Third	29,594	625,139	Third	55,455	1,267,216
Fourth	29,376	635,696	Fourth	57,093	1,298,542
1968			1976		
First	31,001	652,890	First	59,455	1,333,366
Second	31,679	670,441	Second	61,188	1,356,675
Third	32,389	686,839	Third	61,985	1,385,519
Fourth	33,321	700,974	Fourth	63,972	1,421,988
1969			1977		
First	34,985	726,965	First	66,631	1,462,575
Second	35,674	743,953	Second	68,526	1,499,231
Third	36,440	759,986	Third	70,865	1,539,539
Fourth	37,126	774,796	Fourth	72,177	1,587,072
1970			1978		
First	36,475	786,609	First	74,876	1,626,542
Second	37,552	807,993	Second	76,606	1,682,585
Third	37,791	816,677	Third	79,161	1,738,396
Fourth	36,813	821,614	Fourth	81,784	1,800,742
1971			1979		
First	38,065	827,995	First	85,567	1,852,247
Second	37,552	807,993	Second	85,814	1,894,582
Third	39,355	857,893	Third	86,762	1,951,157
Fourth	40,345	874,406	Fourth	87,333	2,010,035
1972			1980		
First	41,932	905,060	First	89,863	2,062,761
Second	42,909	920,203	Second	87,810	2,088,490
Third	43,666	941,186	Third	90,769	2,155,782
Fourth	45,220	975,403	Fourth	95,463	2,228,277

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

TABLE VI-3. FUNCTIONAL COMPONENTS OF INCOME IN MICHIGAN AND THE UNITED STATES: 1975-1980[a] (cont.)

(Dollar figures in thousands)

	1975	1976	1977	1978	1979	1980
			Transfer payments[h]			
Michigan	7,836,127	8,130,610	8,421,892	8,853,588	10,169,832	13,258,450
United States	178,308,000	194,273,000	207,472,000	223,272,000	249,392,000	294,240,000
Percentage[e]	4.4	4.2	4.1	4.0	4.1	4.5
			Personal income, by place of residence			
Michigan	54,558,985	61,333,060	69,237,305	77,567,092	86,414,420	92,339,063
United States	1,259,430,000	1,386,772,000	1,533,768,000	1,717,816,000	1,939,486,000	2,162,936,000
Percentage[e]	4.3	4.4	4.5	4.5	4.5	4.3

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

a. Estimates for 1969-1980 have been revised to reflect the 1980 comprehensive NIPA revisions.

b. See Table VI-4 for details.

c. Consists of wage and salary disbursements, other labor income, and proprietors' income.

d. Includes the capital consumption adjustment for nonfarm proprietors.

e. Michigan as a percentage of United States.

f. Adjust for border workers: Income of U.S. residents working across U.S. borders less income of foreign residents working in the U.S.

g. See Table VI-5 for detail.

h. See Table VII-2. for detail.

n.a.: not applicable.

TABLE VI-5. ANALYSIS OF THE DIVIDEND, INTEREST, AND RENT COMPONENT OF PERSONAL INCOME IN MICHIGAN AND THE UNITED STATES: 1975-1980[a]

(Dollar figures in thousands)

			Interest		Rent		
Year		Dividends	Monetary	Imputed[b]	Monetary	Imputed[c]	Total
1975	Michigan	1,053,170	3,092,748	1,656,246	211,236	540,192	6,553,592[e]
	United States	29,928,000	81,045,000	42,157,000	12,184,000	10,831,000	176,145,000
	Percentage[d]	3.5	3.8	3.9	1.7	5.0	3.7
1976	Michigan	1,333,395	3,365,342	1,749,200	232,674	559,009	7,239,620[e]
	United States	36,514,000	88,412,000	44,111,000	12,846,000	10,659,000	192,542,000
	Percentage[d]	3.7	3.8	4.0	1.8	5.2	3.8
1977	Michigan	1,442,562	3,818,453	2,030,113	302,004	500,242	8,093,374[e]
	United States	38,698,000	100,600,000	50,961,000	15,577,000	9,489,000	215,325,000
	Percentage[d]	3.7	3.8	4.0	1.9	5.3	3.8
1978	Michigan	1,629,984	4,278,017	2,410,274	289,244	477,283	9,084,802[e]
	United States	43,140,000	112,438,000	60,736,000	17,461,000	9,890,000	243,665,000
	Percentage[d]	3.8	3.8	4.0	1.7	4.8	3.7
1979	Michigan	1,902,245	5,244,229	2,866,506	350,975	524,601	10,888,556[e]
	United States	48,636,000	138,683,000	70,918,000	18,799,000	11,724,000	288,760,000
	Percentage[d]	3.9	3.8	4.0	1.9	4.5	3.8
1980	Michigan	2,126,396	6,596,290	3,239,552	362,314	542,297	12,866,849[e]
	United States	54,434,000	176,283,000	79,978,000	19,591,000	12,217,000	342,503,000
	Percentage[d]	3.9	3.7	4.1	1.8	4.4	3.8

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

a. Estimates for 1969-80 have been revised to reflect the 1980 comprehensive NIPA revisions.

b. Value of financial services (mostly "free" checking accounts) rendered persons by banks and other financial institutions without charge plus income withheld by life insurance companies and mutual financial intermediaries on the account of persons, such as the addition of income to policy holder reserves held by life insurance companies.

c. Gross rental income imputed to nonfarm residents of owner-occupied nonfarm dwelling units less the normal expenses incurred in home ownership; that is, the net rent that nonrenters save from owning the homes they live in.

d. Michigan as a percentage of United States.

e. Includes the capital consumption adjustment for rental income of persons.

TABLE VI-7. TOTAL PERSONAL INCOME IN MICHIGAN COUNTIES AND STANDARD METROPOLITAN STATISTICAL AREAS: 1971-1979

(In millions of dollars)

County	1971	1972	1973	1974	1975	1976	1977	1978	1979
Alcona	20.8	23.5	26.4	28.9	33.1	38.5	43.3	47.3	54.1
Alger	22.6	25.0	27.8	31.2	35.2	39.8	43.8	48.3	53.7
Allegan	223.1	255.6	288.5	316.2	336.6	375.3	426.1	496.1	564.8
Alpena	103.5	116.1	126.9	142.1	156.4	172.8	191.2	215.9	239.9
Antrim	40.6	46.9	53.8	62.3	69.0	76.0	87.0	100.5	113.6
Arenac	35.7	39.9	45.9	53.3	55.9	65.6	74.6	80.8	90.4
Baraga	25.1	28.3	29.0	31.8	36.4	40.5	43.5	49.2	54.6
Barry	134.4	152.6	169.5	180.8	195.6	219.0	239.5	272.7	307.8
Bay	461.8	492.5	551.5	613.1	649.1	735.8	836.5	916.9	1,009.0
Benzie	30.2	33.6	37.6	42.0	45.7	51.1	58.8	67.4	75.9
Berrien	687.9	774.2	854.1	929.7	960.5	1,029.2	1,148.5	1,275.1	1,378.6
Branch	132.5	146.6	168.6	177.4	198.3	219.1	255.5	286.6	324.9
Calhoun	611.8	672.3	739.8	789.0	865.5	964.5	1,051.8	1,158.9	1,277.8
Cass	164.7	191.0	217.0	223.7	239.2	272.9	296.7	340.1	371.6
Charlevoix	55.0	63.2	70.4	78.5	87.3	98.0	111.0	126.7	143.3
Cheboygan	53.4	60.1	67.2	74.4	84.1	93.9	104.4	116.9	133.8
Chippewa	102.2	112.0	125.3	136.9	153.4	167.7	162.2	156.2	169.7
Clare	50.2	57.5	63.7	73.5	83.8	95.7	111.3	124.6	141.9
Clinton	191.9	215.7	241.0	257.9	271.2	307.3	350.6	410.2	464.4
Crawford	18.7	21.9	25.9	29.8	37.3	40.9	45.5	50.2	53.4
Delta	116.6	128.6	142.7	162.8	177.9	202.2	216.0	235.4	263.3
Dickinson	95.0	94.8	105.6	123.2	136.3	151.6	170.3	191.2	217.1
Eaton	293.3	324.8	367.9	375.6	424.8	484.2	571.9	638.0	734.2
Emmet	71.0	79.1	88.1	99.0	109.1	122.2	136.0	151.7	172.0
Genesee	1,992.6	2,173.6	2,424.7	2,453.0	2,667.8	3,199.6	3,700.6	4,069.2	4,417.8

TABLE VI-7. TOTAL PERSONAL INCOME IN MICHIGAN COUNTIES AND STANDARD METROPOLITAN STATISTICAL AREAS: 1971-1979 (cont.)

(In millions of dollars)

County	1971	1972	1973	1974	1975	1976	1977	1978	1979
Gladwin	42.2	47.6	53.2	61.3	66.5	75.0	86.0	99.5	115.3
Gogebic	67.0	73.2	80.1	89.9	97.8	104.5	107.9	117.5	130.2
Grand Traverse	164.9	185.2	209.8	235.7	257.6	290.2	334.0	394.1	445.1
Gratiot	143.7	165.9	186.0	211.8	210.8	228.4	248.5	282.3	312.2
Hillsdale	132.5	151.1	173.2	185.1	192.3	217.4	247.0	272.4	307.2
Houghton	101.3	107.8	119.1	132.5	148.4	165.9	182.3	201.5	223.6
Huron	115.9	133.2	159.4	191.0	183.6	192.9	214.1	247.9	282.9
Ingham	1,153.3	1,268.0	1,408.8	1,468.3	1,631.9	1,852.1	2,079.0	2,325.4	2,607.9
Ionia	143.0	162.0	184.7	200.3	213.1	239.3	266.8	309.0	346.2
Iosco	87.3	98.0	108.8	118.9	130.1	146.5	156.1	169.2	186.5
Iron	40.5	44.3	48.2	56.3	63.8	70.7	77.9	84.6	94.6
Isabella	133.1	151.0	169.0	196.3	202.0	228.6	251.4	292.3	324.2
Jackson	591.7	662.6	742.1	794.9	853.1	921.2	1,020.9	1,147.0	1,272.6
Kalamazoo	862.5	927.7	1,030.7	1,141.3	1,250.0	1,379.6	1,514.8	1,721.0	1,946.8
Kalkaska	15.8	18.6	22.2	28.7	37.3	44.3	51.2	57.9	63.8
Kent	1,737.5	1,927.4	2,133.1	2,337.0	2,465.4	2,704.3	3,030.3	3,469.7	3,979.3
Keweenaw	6.5	6.9	7.4	8.1	8.9	9.9	11.0	12.1	13.6
Lake	17.1	19.7	21.5	23.6	25.1	27.9	30.7	35.1	41.1
Lapeer	200.6	228.9	261.8	280.7	302.6	350.1	427.4	487.4	544.5
Leelanau	39.3	44.9	50.7	59.8	61.9	67.3	78.8	94.4	100.5
Lenawee	321.2	366.8	417.5	443.3	477.1	527.3	600.2	658.9	743.5
Livingston	240.4	278.7	331.8	374.6	411.7	494.0	585.7	695.4	790.3
Luce	22.3	24.4	26.7	30.2	35.0	39.3	43.9	47.2	52.6
Mackinac	30.3	34.0	38.4	43.0	48.8	55.8	55.1	60.5	67.6
Macomb	2,958.1	3,319.4	3,785.5	4,049.9	4,288.6	4,963.1	5,779.0	6,543.0	7,192.5

TABLE VI-7. TOTAL PERSONAL INCOME IN MICHIGAN COUNTIES AND STANDARD METROPOLITAN STATISTICAL AREAS: 1971-1979 (cont.)

(In millions of dollars)

County	1971	1972	1973	1974	1975	1976	1977	1978	1979
Manistee	69.0	74.0	75.1	85.9	98.4	109.0	123.8	140.9	156.2
Marquette	220.5	247.5	278.3	311.4	352.6	397.5	428.6	502.7	557.9
Mason	80.8	88.2	88.3	104.5	109.1	120.9	134.5	150.4	170.7
Mecosta	72.5	83.0	91.8	103.8	115.6	125.5	141.5	161.0	180.5
Menominee	71.4	80.2	90.0	102.9	111.2	123.5	137.3	156.6	178.1
Midland	297.9	315.9	340.0	392.8	421.7	482.5	544.8	607.6	679.3
Missaukee	19.8	23.3	27.5	29.8	34.2	37.4	40.5	47.1	54.3
Monroe	475.1	542.1	615.1	651.1	699.3	790.3	913.8	1,023.0	1,129.1
Montcalm	141.1	151.4	169.0	197.2	207.6	225.7	254.9	288.6	323.2
Montmorency	15.9	18.7	21.5	25.0	27.5	31.5	36.4	42.1	46.9
Muskegon	569.4	638.4	688.3	761.3	812.5	890.8	967.4	1,097.4	1,225.9
Newaygo	92.9	104.0	113.6	121.5	131.6	147.8	164.6	191.0	210.3
Oakland	5,137.8	5,725.6	6,481.3	6,917.1	7,373.8	8,355.1	9,687.9	11,054.6	12,301.3
Oceana	56.8	62.7	69.6	81.9	84.9	92.3	105.0	124.2	137.1
Ogemaw	32.6	38.4	42.6	50.5	56.2	64.8	69.1	77.3	91.1
Ontonagon	31.8	37.1	41.2	44.8	51.5	50.2	52.0	52.9	58.2
Osceola	43.1	50.6	60.2	66.8	72.1	74.6	83.8	92.6	103.7
Oscoda	12.2	14.2	15.7	19.1	21.6	24.2	26.0	28.4	31.7
Otsego	35.3	41.6	48.7	54.3	63.2	73.1	84.3	95.9	110.7
Ottawa	512.1	582.1	655.2	712.9	757.0	847.1	987.1	1,142.7	1,321.8
Presque Isle	36.1	40.5	45.3	52.2	57.8	63.2	70.1	77.7	88.7
Roscommon	35.1	39.1	42.9	49.6	58.3	66.7	76.2	84.7	96.5
Saginaw	942.0	1,036.7	1,165.0	1,226.7	1,298.1	1,509.5	1,715.4	1,900.8	2,090.0
St. Clair	471.4	520.1	582.2	633.7	679.4	756.5	853.5	965.6	1,042.7
St. Joseph	186.9	212.0	241.6	249.3	276.3	305.4	338.9	378.3	431.1

TABLE VI-7. TOTAL PERSONAL INCOME IN MICHIGAN COUNTIES AND STANDARD METROPOLITAN STATISTICAL AREAS: 1971-1979 (cont.)

(In millions of dollars)

County	1971	1972	1973	1974	1975	1976	1977	1978	1979
Sanilac	121.3	140.3	154.4	177.5	179.3	195.9	219.0	250.0	285.0
Schoolcraft	23.9	26.4	28.6	32.3	37.7	41.2	45.6	50.7	57.0
Shiawassee	251.1	284.8	317.4	345.0	370.1	411.3	468.4	535.6	600.2
Tuscola	178.1	202.0	233.4	272.2	269.0	305.7	352.9	393.5	444.5
Van Buren	200.4	225.5	254.2	284.1	298.5	329.6	367.5	422.8	468.6
Washtenaw	1,080.7	1,199.6	1,353.5	1,450.7	1,585.3	1,804.8	2,056.4	2,334.5	2,609.2
Wayne	12,520.1	13,739.8	15,124.9	15,902.0	16,152.2	17,974.4	19,879.0	22,037.5	23,910.8
Wexford	63.3	69.8	82.4	92.0	100.3	114.2	131.9	146.4	164.0
Michigan	39,190.6	43,432.5	48,467.4	51,850.5	54,736.9	61,601.3	69,550.3	78,106.4	86,368.6
Standard Metropolitan Statistical Areas									
Ann Arbor	1,080.7	1,199.6	1,353.5	1,450.7	1,585.3	1,804.8	2,056.4	2,334.5	2,609.2
Battle Creek	746.3	824.9	909.3	969.8	1,061.1	1,183.6	1,291.3	1,431.6	1,585.6
Bay City	461.8	492.5	551.5	613.1	649.1	735.8	836.5	916.9	1,009.0
Detroit	21,528.4	23,812.4	26,567.6	28,157.9	29,208.4	32,893.2	37,212.4	41,783.5	45,782.1
Flint	2,243.7	2,458.5	2,742.1	2,797.9	3,037.9	3,610.9	4,169.0	4,604.8	5,018.0
Grand Rapids	2,249.5	2,509.5	2,788.3	3,049.8	3,222.4	3,551.4	4,017.4	4,612.4	5,301.1
Jackson	591.7	662.6	742.1	794.9	853.1	921.2	1,020.9	1,147.0	1,272.6
Kalamazoo-Portage	1,062.9	1,153.3	1,284.9	1,425.4	1,548.5	1,709.3	1,909.3	2,143.8	2,415.4
Lansing-E. Lansing	1,781.4	1,970.5	2,202.4	2,302.1	2,540.9	2,882.9	3,268.3	3,682.6	4,152.8
Muskegon-Muskegon Hghts-Norton Shores	626.2	701.1	757.8	843.1	897.4	983.0	1,081.5	1,221.5	1,363.0
Saginaw	942.0	1,036.7	1,165.0	1,226.7	1,298.1	1,509.5	1,715.4	1,900.8	2,090.0
Toledo, OH-MI	3,267.0	3,598.6	4,026.6	4,308.8	4,596.6	5,125.0	5,689.3	6,246.3	6,895.0

SOURCE: Bureau of Economic Analysis, Regional Economics Information System, special release.

TABLE VI-8. PER CAPITA PERSONAL INCOME IN MICHIGAN COUNTIES AND STANDARD METROPOLITAN STATISTICAL AREAS: 1971-1979

(In dollars)

County	1971	1972	1973	1974	1975	1976	1977	1978	1979
Alcona	2,741	2,898	3,190	3,416	3,867	4,373	4,781	5,118	5,869
Alger	2,671	3,000	3,237	3,552	3,883	4,222	4,479	4,883	5,439
Allegan	3,278	3,677	4,127	4,495	4,720	5,176	5,796	6,687	7,448
Alpena	3,265	3,628	3,931	4,384	4,732	5,216	5,733	6,498	7,201
Antrim	3,040	3,439	3,790	4,137	4,455	4,832	5,441	6,158	6,825
Arenac	3,063	3,312	3,735	4,188	4,253	4,952	5,500	5,921	6,472
Baraga	3,277	3,658	3,655	4,015	4,493	4,974	5,193	5,762	6,305
Barry	3,459	3,814	4,256	4,459	4,711	5,225	5,659	6,382	7,132
Bay	3,904	4,137	4,609	5,097	5,408	6,135	6,927	7,574	8,404
Benzie	3,525	3,812	4,001	4,316	4,592	4,940	5,566	6,351	6,921
Berrien	4,186	4,636	5,059	5,486	5,646	6,026	6,751	7,596	8,271
Branch	3,434	3,728	4,343	4,566	5,224	5,743	6,712	7,428	8,367
Calhoun	4,367	4,754	5,197	5,567	6,141	6,880	7,499	8,254	9,174
Cass	3,816	4,408	4,869	4,961	5,230	5,979	6,508	7,479	8,137
Charlevoix	3,206	3,685	3,919	4,323	4,687	5,126	5,674	6,504	7,292
Cheboygan	3,098	3,345	3,603	3,882	4,329	4,728	5,190	5,785	6,582
Chippewa	3,079	3,255	3,597	3,811	4,256	4,564	4,483	5,110	5,787
Clare	2,862	3,133	3,291	3,597	3,928	4,293	4,854	5,303	5,943
Clinton	3,945	4,443	4,792	5,011	5,163	5,830	6,505	7,523	8,365
Crawford	2,758	3,116	3,425	3,715	4,505	4,633	4,991	5,478	5,684
Delta	3,172	3,439	3,781	4,252	4,547	5,096	5,407	5,893	6,654
Dickinson	3,554	3,907	4,353	5,035	5,465	6,038	6,703	7,433	8,484
Eaton	4,174	4,541	4,978	5,015	5,472	6,260	7,215	7,843	8,748
Emmet	3,690	4,042	4,375	4,765	5,123	5,702	6,329	6,966	7,791
Genesee	4,443	4,818	5,355	5,427	5,944	7,163	8,250	9,015	9,790

TABLE VI-8. PER CAPITA PERSONAL INCOME IN MICHIGAN COUNTIES AND STANDARD METROPOLITAN STATISTICAL AREAS: 1971-1979 (cont.)

(In dollars)

County	1971	1972	1973	1974	1975	1976	1977	1978	1979
Gladwin	3,004	3,229	3,453	3,771	3,961	4,359	4,865	5,461	5,989
Gogebic	3,266	3,561	3,863	4,332	4,718	5,115	5,352	5,949	6,642
Grand Traverse	4,066	4,408	4,841	5,228	5,718	6,298	7,044	8,048	8,843
Gratiot	3,613	4,155	4,626	5,296	5,281	5,776	6,266	7,152	7,872
Hillsdale	3,470	3,883	4,424	4,645	4,788	5,383	6,088	6,654	7,664
Houghton	2,838	2,970	3,292	3,626	4,011	4,441	4,881	5,516	6,201
Huron	3,303	3,774	4,484	5,395	5,122	5,373	5,972	6,902	7,901
Ingham	4,384	4,760	5,245	5,435	6,081	6,858	7,722	8,593	9,632
Ionia	3,053	3,394	3,917	4,236	4,485	4,946	5,440	6,253	6,965
Iosco	3,292	3,555	3,898	4,187	4,570	5,032	5,199	5,615	6,205
Iron	2,966	3,179	3,499	4,056	4,485	4,873	5,331	5,775	6,413
Isabella	2,865	3,130	3,516	3,920	4,087	4,519	4,917	5,662	6,254
Jackson	4,132	4,598	5,136	5,437	5,807	6,260	6,865	7,672	8,519
Kalamazoo	4,289	4,579	5,147	5,660	6,204	6,790	7,522	8,346	9,369
Kalkaska	2,540	2,655	2,762	3,879	4,403	3,925	4,669	4,766	5,240
Kent	4,216	4,639	5,078	5,521	5,811	6,331	7,024	7,967	9,011
Keweenaw	2,605	3,012	3,323	3,757	4,035	4,235	4,625	5,217	5,893
Lake	2,773	3,068	3,305	3,550	3,693	4,062	4,322	4,925	5,697
Lapeer	3,700	4,141	4,559	4,663	4,903	5,554	6,622	7,302	7,872
Leelanau	3,493	3,849	4,213	4,895	4,973	5,296	6,078	7,155	7,121
Lenawee	3,893	4,395	4,920	5,151	5,524	6,110	6,953	7,571	8,555
Livingston	3,903	4,329	4,763	4,993	5,298	6,083	6,776	7,497	7,966
Luce	3,275	3,585	3,900	4,254	4,966	5,446	6,041	6,549	7,521
Mackinac	3,009	3,290	3,722	4,078	4,604	5,257	5,118	5,541	6,252
Macomb	4,651	5,188	5,777	6,100	6,428	7,378	8,435	9,414	10,177

TABLE VI-8. PER CAPITA PERSONAL INCOME IN MICHIGAN COUNTIES AND STANDARD METROPOLITAN STATISTICAL AREAS: 1971-1979 (cont.)

(In dollars)

County	1971	1972	1973	1974	1975	1976	1977	1978	1979
Manistee	3,279	3,497	3,533	4,070	4,552	4,994	5,646	6,347	7,100
Marquette	3,302	3,624	4,081	4,431	5,081	5,576	5,860	6,720	7,382
Mason	3,394	3,604	3,560	4,283	4,430	4,866	5,331	6,047	6,843
Mecosta	2,501	2,703	2,834	3,104	3,414	3,656	4,068	4,644	5,159
Menominee	2,867	3,211	3,595	4,122	4,373	4,843	5,240	5,903	6,525
Midland	4,599	4,861	5,157	5,919	6,242	7,098	7,861	8,682	9,555
Missaukee	2,516	3,022	3,459	3,572	3,887	4,123	4,321	4,859	5,427
Monroe	3,911	4,388	4,937	5,210	5,538	6,224	7,042	7,748	8,578
Montcalm	3,488	3,637	4,011	4,608	4,729	5,087	5,649	6,348	7,011
Montmorency	2,952	3,274	3,394	3,674	3,978	4,400	4,953	5,509	6,110
Muskegon	3,594	4,018	4,355	4,839	5,162	5,617	6,147	6,920	7,718
Newaygo	3,282	3,601	3,808	3,996	4,214	4,685	5,088	5,790	6,261
Oakland	5,603	6,193	6,875	7,223	7,640	8,605	9,799	10,975	12,058
Oceana	3,049	3,256	3,568	4,095	4,096	4,433	5,000	5,889	6,498
Ogemaw	2,663	3,011	3,146	3,539	3,773	4,275	4,518	4,820	5,613
Ontonagon	2,956	3,421	3,700	4,094	4,546	4,394	4,733	5,025	5,793
Osceola	2,717	3,058	3,636	3,963	4,183	4,196	4,602	5,084	5,722
Oscoda	2,502	2,730	2,777	3,224	3,527	3,909	4,041	4,108	4,408
Otsego	3,253	3,580	3,923	4,126	4,708	5,263	5,880	6,574	7,336
Ottawa	3,959	4,424	4,788	5,136	5,369	5,929	6,751	7,601	8,547
Presque Isle	2,767	3,057	3,297	3,788	4,168	4,507	4,974	5,511	6,262
Roscommon	3,233	3,394	3,317	3,633	4,018	4,415	4,831	5,262	5,955
Saginaw	4,222	4,615	5,161	5,415	5,736	6,663	7,545	8,359	9,221
St. Clair	3,784	4,109	4,568	4,908	5,233	5,790	6,468	7,218	7,770
St. Joseph	3,908	4,314	4,835	4,914	5,435	5,969	6,594	7,297	8,280

TABLE VI-8. PER CAPITA PERSONAL INCOME IN MICHIGAN COUNTIES AND STANDARD METROPOLITAN STATISTICAL AREAS: 1971-1979 (cont.)

(In dollars)

County	1971	1972	1973	1974	1975	1976	1977	1978	1979
Sanilac	3,363	3,801	4,072	4,608	4,602	4,976	5,553	6,279	7,158
Schoolcraft	2,851	3,136	3,353	3,844	4,370	4,628	5,065	5,578	6,527
Shiawassee	3,858	4,329	4,730	5,041	5,348	5,954	6,727	7,592	8,465
Tuscola	3,581	3,980	4,515	5,155	5,034	5,655	6,464	7,115	7,985
Van Buren	3,467	3,780	4,233	4,690	4,836	5,334	5,897	6,764	7,499
Washtenaw	4,599	4,998	5,589	5,735	6,428	7,238	8,187	9,266	10,275
Wayne	4,691	5,165	5,810	6,212	6,413	7,280	8,197	9,221	10,138
Wexford	3,143	3,378	3,860	4,281	4,570	5,174	5,874	6,459	7,297
Michigan	4.371	4,804	5,341	5,687	6,008	6,760	7,603	8,507	9,381
				Standard metropolitan statistical areas					
Ann Arbor	4,599	4,998	5,589	5,735	6,428	7,238	8,187	9,266	10,275
Battle Creek	4,170	4,547	4,992	5,320	5,815	6,499	7,073	7,817	8,691
Bay City	3,904	4,137	4,609	5,097	5,408	6,135	6,927	7,574	8,404
Detroit	4,824	5,326	5,962	6,333	6,608	7,497	8,492	9,527	10,433
Flint	4,369	4,756	5,274	5,376	5,865	7,001	8,045	8,823	9,610
Grand Rapids	4,155	4,587	5,007	5,426	5,701	6,230	6,955	7,873	8,890
Jackson	4,132	4,598	5,136	5,437	5,807	6,260	6,865	7,672	8.519
Kalamazoo-Portage	4,105	4,397	4,936	5,436	5,883	6,451	7,143	7,978	8,937
Lansing-E. Lansing	4,154	4,538	5,006	5,187	5,697	6,428	7,240	8,078	9,029
Muskegon-Muskegon Hgts-Norton Shores	3,536	3,936	4,268	4,755	5,038	5.480	6,013	6,799	7,575
Saginaw	4,222	4,615	5,161	5,415	5,736	6,663	7,545	8,359	9,221
Toledo	4,233	4,626	5,158	5,506	5,880	6,625	7,349	8,070	8,962

SOURCE: Bureau of Economic Analysis, Regional Economics Information System, special release.

TABLE VI-9. PERCENTAGE CHANGE IN PER CAPITA PERSONAL INCOME, 1974-1979 AND 1978-1979, AND RANKING OF MICHIGAN COUNTIES ACCORDING TO PER CAPITA PERSONAL INCOME: 1979

County	Per capita personal income	Percentage change 1974 to 1979	Percentage change 1978 to 1979	County	Per capita personal income	Percentage change 1974 to 1979	Percentage change 1978 to 1979
Oakland	12,058	66.94	9.86	Barry	7,132	59.95	11.75
Washtenaw	10,275	79.16	10.89	Leelanau	7,121	45.47	-0.47
Macomb	10,177	66.84	8.10	Manistee	7,100	74.45	11.86
Wayne	10,138	63.20	9.94	Montcalm	7,011	52.15	10.44
Genesee	9,790	80.39	8.59	Ionia	6,965	64.42	11.39
Ingham	9,632	77.22	12.09	Benzie	6,921	60.36	8.97
Midland	9,555	61.43	10.05	Mason	6,843	59.77	13.16
Kalamazoo	9,369	65.53	12.26	Antrim	6,825	64.97	10.83
Saginaw	9,221	70.29	10.31	Delta	6,654	56.49	12.91
Calhoun	9,174	64.79	11.15	Gogebic	6,642	53.32	11.65
Kent	9,011	63.21	13.10	Cheboygan	6,582	69.55	13.78
Grand Traverse	8,843	69.15	9.88	Schoolcraft	6,527	69.80	17.01
Eaton	8,748	74.44	11.54	Menominee	6,525	58.29	10.54
Monroe	8,578	64.64	10.71	Oceana	6,498	58.68	10.34
Lenawee	8,555	66.08	12.99	Arenac	6,472	54.54	9.31
Ottawa	8,547	66.41	12.44	Iron	6,413	58.11	11.04
Jackson	8,519	56.68	11.04	Baraga	6,305	57.04	9.42
Dickinson	8,484	68.50	14.14	Presque Isle	6,262	65.31	13.63
Shiawassee	8,465	67.92	11.50	Newaygo	6,261	56.68	8.13
Bay	8,404	64.88	10.96	Isabella	6,254	59.54	10.45
Branch	8,367	83.24	12.64	Mackinac	6,252	53.31	12.83
Clinton	8,365	66.93	11.19	Iosco	6,205	48.19	10.51
St. Jospeh	8,280	68.50	13.47	Houghton	6,201	71.01	12.42
Berrien	8,271	50.77	8.89	Montmorency	6,110	66.30	10.91
Cass	8,137	64.02	8.79	Gladwin	5,989	58.82	9.67
Tuscola	7,985	54.90	12.23	Roscommon	5,955	63.91	13.17
Livingston	7,966	59.54	6.25	Clare	5,943	65.22	12.07
Huron	7,901	46.45	14.47	Keweenaw	5,893	56.85	12.96
Gratiot	7,872	48.64	10.07	Alcona	5,869	71.81	14.67
Lapeer	7,872	68.82	7.81	Ontonagon	5,793	41.49	15.28
Emmet	7,791	63.50	11.84	Chippewa	5,787	51.85	13.25
St. Clair	7,770	58.31	7.65	Osecola	5,722	44.39	12.54
Muskegon	7,718	59.51	11.53	Lake	5,697	60.49	15.67
Hillsdale	7,664	64.99	15.18	Crawford	5,684	53.00	3.76
Luce	7,521	76.80	14.84	Ogemaw	5,613	58.60	16.45
Van Buren	7,499	59.89	10.87	Missaukee	5,427	51.93	11.69
Allegan	7,448	65.69	11.38	Alger	5,439	53.12	11.39
Marquette	7,382	66.60	9.85	Kalkaska	5,240	35.08	9.95
Ostego	7,336	77.80	11.59	Mecosta	5,159	66.20	11.09
Wexford	7,297	70.45	12.97	Oscoda	4,408	36.72	7.30
Charlevoix	7,292	68.70	12.11				
Alpena	7,201	64.26	10.82	Michigan	9,381	64.95	10.27
Sanilac	7,158	55.34	13.99	United States	8,757	61.33	11.61

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

TABLE VI-10. DIVIDENDS, INTEREST, AND RENT PER CAPITA, AND RANKING OF MICHIGAN COUNTIES ACCORDING TO DIVIDENDS, INTEREST, AND RENT AS A PERCENTAGE OF TOTAL PERSONAL INCOME: 1979

County	Percentage	Per capita	County	Percentage	Per capita
Roscommon	25.8	$ 1,537	Newaygo	12.9	$ 805
Leelanau	23.3	1,659	Menominee	12.8	835
Montmorency	22.6	1,379	St. Joseph	12.8	1,061
Alcona	22.2	1,297	Lenawee	12.8	1,097
Oscoda	21.0	925	Bay	12.6	1,056
Emmet	19.8	1,541	Barry	12.5	889
Crawford	19.5	1,107	Hillsdale	12.5	962
Benzie	19.3	1,334	Gladwin	12.3	739
Antrim	19.0	1,293	Mecosta	12.3	633
Huron	18.3	1,444	Kent	12.2	1,099
Lake	17.3	987	Alpena	12.1	871
Ogemaw	17.3	973	Beraga	12.1	7[illegible]7
Keweenaw	16.8	989	Branch	11.9	996
Houghton	16.7	1,033	Allegan	11.9	889
Mackinac	16.7	1,046	Washtenaw	11.9	1,226
Cheboygan	16.6	1,096	Isabella	11.8	737
Sanilac	16.4	1,171	Jackson	11.8	1,008
Iosco	15.6	969	Ottawa	11.6	994
Presque Isle	15.4	960	Tuscola	11.6	924
Charlevoix	15.3	1,117	Cass	11.5	935
Missaukee	15.2	825	Montcalm	11.4	799
Grand Traverse	15.2	1,343	Ontonagon	11.4	662
Arnec	15.2	980	Van Buren	11.3	848
Manistee	15.1	1,069	Gratiot	11.3	893
Otsego	15.0	1,097	Calhoun	11.2	1,032
Oakland	14.8	1,785	Saginaw	11.1	1,026
Gogebic	14.7	980	Livingston	11.0	879
Midland	14.6	1,391	Eaton	10.8	952
Mason	14.5	995	Monroe	10.7	918
Schoolcraft	14.4	943	Ionia	10.6	740
Clare	14.3	851	Muskegon	10.3	796
Iron	14.2	915	Ingham	10.2	982
Chippewa	13.9	804	Clinton	10.1	844
Oceana	13.7	893	Shiawassee	9.9	840
Delta	13.5	901	Lapeer	9.7	768
Berrien	13.5	1,116	Macomb	9.7	992
Wexford	13.4	977	Wayne	9.7	985
St. Clair	13.4	1,038	Marquette	9.7	712
Kalkaska	13.3	698	Genesee	9.6	941
Dickinson	13.2	1,122	Luce	8.9	668
Alger	13.1	710			
Kalamazoo	12.9	1,207	Michigan	11.6	1,085
Osceola	12.9	741	United States	14.1	1,235

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

TABLE VI-11. GROWTH IN TOTAL PERSONAL INCOME, 1974-1979, AND RANKING OF MICHIGAN COUNTIES ACCORDING TO GROWTH IN TOTAL PERSONAL INCOME: 1978-1979

	Percentage change			Percentage change	
County	1974-1979	1978-1979	County	1974-1979	1978-1979
Ogemaw	80	18	Oscoda	66	12
Lake	74	17	Keweenaw	68	12
Ottawa	85	16	Ingham	78	12
Gladwin	88	16	Arenac	70	12
Missaukee	82	15	Mackinac	57	12
Otsego	104	15	Midland	73	12
Kent	70	15	Iron	68	12
Eaton	95	15	Delta	62	12
Livingston	111	14	Marquette	79	11
Allegan	79	14	Montmorency	87	11
Huron	48	14	Van Buren	65	11
Sanilac	61	14	Isabella	65	11
Menominee	73	14	Baraga	71	11
Presque Isle	70	14	Alpena	69	11
Dickinson	76	14	Alger	72	11
Clare	93	14	Oakland	78	11
Cheboygan	80	14	Manistee	82	11
Alcona	87	14	Jackson	60	11
St. Joseph	73	14	Houghton	69	11
Roscommon	95	14	Gogebic	45	11
Antrim	83	13	Gratiot	47	11
Grand Traverse	89	13	Luce	74	11
Barry	70	13	Oceana	67	10
Clinton	80	13	Newaygo	73	10
Mason	63	13	Macomb	78	10
Charlevoix	83	13	Saginaw	70	10
Tuscola	63	13	Monroe	73	10
Hillsdale	66	13	Kalkaska	122	10
Emmet	74	13	Calhoun	62	10
Branch	83	13	Bay	65	10
Kalamazoo	71	13	Iosco	57	10
Lenawee	68	13	Ontonagon	30	10
Montcalm	64	12	Cass	66	9
Lapeer	94	12	Wayne	50	9
Ionia	73	12	Genesee	80	9
Benzie	81	12	Chippewa	24	9
Washtenaw	80	12	St. Clair	65	8
Mecosta	74	12	Berrien	48	8
Shiawassee	74	12	Leelanau	68	6
Schoolcaraft	77	12	Crawford	79	6
Osceola	55	12			
Muskegon	61	12	Michigan	67	11
Wexford	78	12	United States	68	13

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

TABLE VI-12. GROWTH IN LABOR AND PROPRIETORS' EARNINGS, BY COUNTY IN WHICH EARNED, 1974-1979, AND RANKING OF MICHIGAN COUNTIES ACCORDING TO GROWTH IN LABOR AND PROPRIETORS' EARNINGS, BY COUNTY IN WHICH EARNED: 1978-1979

	Percentage change			Percentage change	
County	1974-1979	1978-1979	County	1974-1979	1978-1979
Ogemaw	79	23	Alpena	64	11
Gladwin	74	22	Mecosta	66	11
Missaukee	88	20	Muskegon	56	11
Alcona	92	19	Kalkaska	171	11
Livingston	110	18	Luce	73	11
Kent	75	17	Delta	53	11
Cheboygan	85	16	Iron	55	11
Ostego	125	16	Marquette	77	10
Tuscola	40	16	Van Buren	52	10
St. Joseph	72	16	Baraga	68	10
Shiawassee	63	16	Isabella	62	10
Huron	35	15	Manistee	85	10
Ottawa	92	15	Jackson	55	10
Oakland	101	15	Mackinac	45	10
Presque Isle	58	15	Alger	66	10
Dickinson	77	15	Houghton	66	10
Sanilac	48	14	Oceana	69	9
Clare	80	14	Oscoda	53	9
Mason	60	14	Saginaw	74	9
Barry	61	14	Calhoun	60	9
Kalamazoo	73	14	Bay	53	9
Roscommon	88	14	Monroe	60	9
Arenac	61	14	Lake	24	9
Clinton	58	13	Lapeer	71	8
Grand Traverse	101	13	Montcalm	40	8
Charlevoix	90	13	Iosco	41	8
Menominee	67	13	Ionia	66	7
Emmet	67	13	Cass	75	7
Ingham	80	13	Macomb	77	7
Lenawee	49	13	Genesee	90	7
Antrim	62	12	Wayne	46	7
Washtenaw	96	12	Gratiot	36	7
Branch	86	12	Newaygo	57	6
Hillsdale	62	12	Berrien	39	6
Osceola	36	12	St. Clair	56	6
Wexford	77	12	Chippewa	3	6
Eaton	60	12	Montmorency	77	5
Midland	76	12	Keweenaw	45	5
Gogebic	39	12	Crawford	68	-4
Schoolcraft	74	12	Leelanau	26	-7
Ontonagon	1	12			
Allegan	63	11	Michigan	66	10
Benzie	77	11	United States	65	12

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

TABLE VI-13. EARNINGS RESIDENCE ADJUSTMENT FOR MICHIGAN COUNTIES: 1979

(Dollar figures in thousands)

County	Labor and proprietors' earnings, by county in which earned	Residence adjustment	Labor and proprietors' earnings, by county in which received	Proportion[a]
Eaton	194,000	392,864	586,864	.670
Clinton	129,916	248,752	378,668	.660
Huron	177,052	11,768	188,820	.623
Livingston	275,043	365,694	640,737	.571
Leelanau	32,359	30,163	62,522	.482
Lapeer	225,961	207,271	433,232	.480
Shiawassee	255,730	216,465	472,195	.460
Monroe	479,288	413,871	893,159	.434
Gladwin	43,365	32,460	75,825	.430
Barry	135,455	96,148	231,603	.420
Cass	171,110	111,963	285,073	.400
Lake	12,664	8,218	20,882	.400
Tuscola	211,544	126,751	337,295	.373
Allegan	269,317	154,934	424,251	.370
Newaygo	95,942	50,307	146,249	.344
Oceana	60,483	31,620	92,103	.343
Van Buren	224,430	107,665	332,097	.324
Arenac	38,720	18,163	56,883	.320
Macomb	4,582,898	1,335,217	5,918,115	.300
Clare	60,453	24,756	85,209	.300
Alcona	18,814	7,210	26,024	.280
Keweenaw	5,101	1,906	7,007	.272
Missaukee	25,411	9,393	34,804	.270
Houghton	127,627	3,510	131,137	.270
St. Clair	556,780	195,120	751,900	.260
Ionia	193,022	64,003	257,025	.250
Bay	599,337	161,512	760,849	.212
Montcalm	186,397	44,549	230,946	.193
Hillsdale	181,338	43,083	224,421	.192
Antrim	56,367	13,178	69,545	.190
Sanilac	155,094	34,326	189,420	.181
Iron	47,077	10,181	57,258	.180
Gogebic	61,951	12,905	74,856	.172
Ottawa	872,448	179,739	1,052,187	.171
Menominee	104,357	21,335	125,692	.170

TABLE VI-13. EARNINGS RESIDENCE ADJUSTMENT FOR MICHIGAN COUNTIES: 1979 (cont.)

(Dollar figures in thousands)

County	Labor and proprietors' earnings, by county in which earned	Residence adjustment	Labor and proprietors' earnings, by county in which received	Proportion[a]
Lenawee	468,593	90,533	559,126	.162
Benzie	38,899	6,551	45,450	.144
Gratiot	204,422	31,400	235,822	.133
Oakland	8,422,415	1,147,649	9,470,064	.120
Crawford	27,702	3,124	30,826	.101
Alger	31,342	3,251	34,593	.094
Mecosta	111,428	10,716	122,144	.090
Isabella	219,050	20,624	239,674	.090
Baraga	33,486	2,690	36,176	.074
Montmorency	20,281	1,625	21,906	.074
Chippewa	101,083	661	101,744	.070
St. Joseph	301,026	17,663	318,689	.060
Oscoda	14,408	806	15,214	.053
Kalkaska	41,270	2,186	43,456	.050
Presque Isle	54,251	2,590	56,841	.050
Branch	231,423	11,038	242,461	.050
Osceola	63,905	2,810	66,715	.042
Charlevoix	93,449	3,825	97,274	.040
Jackson	943,430	31,756	975,186	.033
Mackinac	40,533	1,328	41,861	.032
Ogemaw	50,365	1,285	51,650	.025
Cheboygan	81,487	1,576	83,063	.020
Manistee	102,754	-17	102,737	-.0002
Schoolcraft	34,535	-16	34,519	-.0005
Berrien	1,007,451	-8,120	999,331	-.0080
Iosco	120,459	-1,166	119,293	-.0097
Marion	117,205	-1,521	115,684	-.0130
Alpena	171,958	-2,696	169,262	-.0160
Marquette	437,418	-9,077	428,341	-.0210
Muskegon	938,415	-21,918	916,497	-.0234
Roscommon	42,766	-1,756	41,010	-.0411
Calhoun	1,014,608	-51,640	962,968	-.0510
Luce	39,724	-2,118	37,606	-.0533
Dickinson	162,813	-9,508	153,305	-.0600
Emmet	118,526	-8,290	110,236	-.0699
Otsego	83,900	-6,182	77,727	-.0740

TABLE VI-13. EARNINGS RESIDENCE ADJUSTMENT FOR MICHIGAN COUNTIES: 1979 (cont.)

(Dollar figures in thousands)

County	Labor and proprietors' earnings, by county in which earned	Residence adjustment	Labor and proprietors' earnings, by county which received	Proportion[a]
Kalamazoo	1,623,353	-128,412	1,494,941	-.0791
Saginaw	1,790,613	-167,887	1,622,726	-.0940
Genesee	3,943,348	-421,674	3,521,674	-.1070
Delta	176,072	-2,036	174,036	-.1156
Kent	3,471,816	-409,517	3,062,299	-.1180
Grand Traverse	362,221	-43,543	318,678	-.1202
Wexford	125,632	-15,872	109,760	-.1234
Wayne	21,333,789	-2,941,850	18,391,939	-.1380
Midland	638,571	-113,519	525,052	-.1780
Washtenaw	2,637,598	-586,814	2,056,784	-.2202
Ingham	2,827,130	-777,431	2,049,699	-.2750
Ontonagon	54,448	-18,347	36,101	-.3370
Michigan	65,838,231	436,762	86,274,993	.0051
United States	1,404,637,000	-412,000	1,404,225,000	-.0003

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

a. Residence Adjustment as percentage of labor and proprietors' earnings received (where positive) or generated (where negative).

TABLE VI-14. RANKING OF MICHIGAN COUNTIES ACCORDING TO NONFARM PROPRIETORS' EARNINGS AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979

County	Percentage		County	Percentage	
	1978	1979		1978	1979
Lake	25.17	26.82	Emmet	7.99	8.30
Alcona	22.62	23.71	Manistee	7.56	8.20
Montmorency	17.19	20.97	Oakland	7.52	8.20
Oscoda	17.87	19.95	Iosco	7.33	8.15
Mackinac	13.45	17.10	Lapeer	6.90	8.08
Leelanau	13.66	16.75	Isabella	7.90	8.06
Iron	14.33	16.11	Allegan	8.16	8.04
Alger	13.60	16.09	Monroe	7.23	7.96
Missaukee	14.07	16.03	Mason	7.17	7.75
Clare	14.68	15.73	Van Buren	7.37	7.56
Roscommon	15.12	15.19	Shiawassee	8.02	7.50
Gladwin	15.96	15.07	St. Clair	7.09	7.48
Clinton	10.54	12.85	Ionia	6.97	7.36
Benzie	11.01	12.68	Dickinson	7.07	7.33
Schoolcraft	11.50	12.25	Cass	7.39	7.26
Newaygo	10.87	12.02	Ottawa	6.78	7.21
Cheboygan	10.75	11.97	Bay	6.65	7.12
Gogebic	11.79	11.75	Alpena	6.49	7.05
Crawford	10.37	11.67	Hillsdale	6.83	6.86
Keweenaw	10.96	11.57	Luce	6.76	6.69
Chippewa	11.08	11.53	Grand Traverse	6.57	6.65
Oceana	10.11	11.47	Berrien	5.86	6.48
Ogemaw	10.40	11.19	Lenawee	6.05	6.41
Osceola	10.07	10.55	Branch	5.88	6.16
Eaton	10.40	10.54	Gratiot	6.12	6.13
Livingston	9.79	10.50	St. Joseph	5.64	5.70
Arenac	9.28	10.47	Kent	5.70	5.67
Wexford	8.70	10.57	Ontonagon	5.46	5.51
Baraga	9.88	10.03	Muskegon	4.93	5.22
Otesego	8.80	9.98	Macomb	4.36	5.11
Barry	9.81	9.83	Kalamazoo	4.64	4.81
Sanilac	8.76	9.76	Jackson	4.54	4.59
Presque Isle	10.83	9.10	Calhoun	4.31	4.35
Antrim	8.49	9.00	Marquette	3.91	4.35
Huron	8.28	8.89	Saginaw	3.98	4.25
Kalkaska	7.60	8.87	Ingham	3.47	3.45
Mecosta	8.04	8.85	Washtenaw	2.93	3.24
Charlevoix	8.49	8.83	Midland	2.89	3.13
Tuscola	8.73	8.81	Genesee	2.84	3.06
Montcalm	7.38	8.70	Wayne	2.96	2.85
Houghton	7.76	8.59			
Delta	8.16	8.54	Michigan	4.71	5.00
Menominee	8.69	8.35	United States	6.76	6.69

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

TABLE VI-15 PREVIOUS YEAR'S MEDIAN AND MEAN INCOME AMONG HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA AND IN ALL U.S. STANDARD METROPOLITAN STATISTICAL AREAS: 1977-1980

	Detroit			U.S.		
	Inside central city	Outside central city	Total	Inside central city	Outside central city	Total
	March 1977					
Median	11,639	19,346	16,618	11,156	15,617	13,624
Error	866	563	364	95	70	61
Mean	13,042	21,173	18,412	13,682	17,560	15,865
Error	479	502	385	83	81	59
	March 1978					
Median	12,726	20,050	17,785	12,059	16,579	14,611
Error	569	532	405	83	86	74
Mean	14,550	22,096	19,676	14,898	18,940	17,137
Error	538	530	411	91	85	63
	March 1979					
Median	15,623	22,392	19,710	13,089	18,238	15,970
Error	764	761	537	119	118	84
Mean	16,672	24,962	22,359	16,305	20,743	18,779
Error	776	713	563	123	116	86
	March 1980					
Median	13,170	24,523	21,366	14,397	20,270	17,611
Error	1,306	717	553	146	128	107
Mean	15,985	26,412	23,167	17,772	23,087	20,756
Error	781	683	555	131	130	94

SOURCE: Bureau of the Census, Current Population Reports, Series P-60, No. 126 (Washington, D. C.: 1981), Table 11, and similar documents for previous years.

NOTE: The surveys were conducted in March 1977, 1978, 1979, and 1980. The income data pertain to 1976, 1977, 1978, and 1979. Median income is that of the middle household in a ranking of households, highest to lowest, in income. Mean income is the arithmetic average, that is, total income received by all households divided by the number of households. A household consists of all persons, whether or not related, who occupy a house, an apartment, or other group of rooms, or a room, which constitutes a housing unit. Error is a measure of sampling variability, that is, of the variations that occurred by chance because a sample rather than the whole population was surveyed. The chances are about 68 out of 100 that an estimate from the survey differs from what the complete census figure would have been by less than the standard error.

TABLE VI-16. PREVIOUS YEAR'S MONEY INCOME SIZE DISTRIBUTION, AND MEAN AND MEDIAN INCOME AMONG HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA AND IN ALL U.S. STANDARD METROPOLITAN STATISTICAL AREAS: 1978, 1979 AND 1980

Income class: 1978 and 1979	Income class: 1980	March 1978			March 1979			March 1980		
		Inside central city	Outside central city	Total	Inside central city	Outside central city	Total	Inside central city	Outside central city	Total
		Detroit, number of households in thousands								
Less than $4,000	Less than $5,000	96	45	141	59	53	112	108	75	183
4,000-6,999	5,000-9,999	58	71	129	65	67	132	89	80	169
7,000-9,999	10,000-14,999	21	81	102	29	47	76	52	96	148
10,000-11,999	15,000-19,999	32	58	90	23	36	59	55	117	172
12,000-14,999	20,000-24,999	39	55	94	34	69	103	60	151	211
15,000-17,499	25,000-29,999	35	83	119	44	69	113	26	128	154
17,500-19,999	30,000-34,999	37	72	109	42	86	128	20	104	124
20,000-24,999	35,000-39,999	49	144	193	59	127	186	24	84	108
25,000-29,999	40,000-49,999	27	125	152	32	116	148	17	109	126
30,000-49,999	50,000-74,999	44	168	212	53	226	279	6	56	62
50,000 and over	75,000 and over	3	32	35	6	79	84	-	12	12
Total	Total	441	934	1,375	446	974	1,421	457	1,012	1,470

TABLE VI-16. PREVIOUS YEAR'S MONEY INCOME SIZE DISTRIBUTION, AND MEAN AND MEDIAN INCOME AMONG HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA AND IN ALL U.S. STANDARD METROPOLITAN STATISTICAL AREAS: 1978, 1979 AND 1980 (cont.)

Income class: 1978 and 1979	Income class: 1980	March 1978			March 1979			March 1980		
		Inside central city	Outside central city	Total	Inside central city	Outside central city	Total	Inside central city	Outside central city	Total
		U.S., number of households in thousands								
Less than $4,000	Less than $5,000	3,414	2,265	5,679	3,120	2,004	5,124	3,918	2,593	6,511
4,000-6,999	5,000-9,999	3,355	2,727	6,072	3,121	2,512	5,634	4,403	3,834	8,237
7,000-9,999	10,000-14,999	2,905	2,799	5,704	2,763	2,653	5,416	3,949	4,312	8,261
10,000-11,999	15,000-19,999	1,725	1,795	3,520	1,678	1,846	3,524	3,216	4,193	7,409
12,000-14,999	20,000-24,999	2,426	2,879	5,305	2,309	2,528	4,837	2,721	4,088	6,809
15,000-17,499	25,000-29,999	1,782	2,647	4,429	1,932	2,437	4,369	1,910	3,498	5,408
17,500-19,999	30,000-34,999	1,447	2,204	3,651	1,530	2,257	3,787	1,181	2,470	3,652
20,000-24,999	35,000-39,999	2,340	3,887	6,226	2,440	4,150	6,596	749	1,640	2,389
25,000-29,999	40,000-49,999	1,386	2,808	4,194	1,627	3,057	4,684	832	1,891	2,723
30,000-49,999	50,000-74,999	1,696	3,600	5,295	2,204	4,778	6,982	623	1,347	1,970
50,000 and over	75,000 and over	438	855	1,293	634	1,213	1,847	201	481	682
Total	Total	22,914	28,455	51,369	23,363	29,436	52,799	23,705	30,346	54,051

SOURCE: Bureau of the Census, Current Population Reports, Consumer Income, Series P-60, nos. 121 and 126 (Washington, D.C., 1980 and 1981) Table 11.

NOTE: The surveys were conducted in March 1979 and 1980. The income data pertain to 1978 and 1979. Median income is that of the middle household in a ranking of households, highest to lowest, in income. Mean income is the arithmetic average, that is, total income received by all households divided by the number of households. A household consists of all persons, whether or not related, who occupy a house, an apartment, or other group of rooms, or a room, which constitutes a housing unit. Error is a measure of sampling variability, that is, of the variations that occurred by chance because a sample rather than the whole population was surveyed. The chances are about 68 out of 100 that an estimate from the survey differs from what the complete census figure would have been by less than the standard error.

TABLE VI-17. PREVIOUS YEAR'S MEDIAN AND MEAN INCOME AMONG FAMILIES AND UNRELATED INDIVIDUALS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA AND IN ALL U.S. STANDARD METROPOLITAN STATISTICAL AREAS: 1976-1979.

	Detroit			United States		
	Famlies		Unrelated individuals total SMSA	Famlies		Unrelated individuals total SMSA
	Inside central city	Total SMSA		Inside central city	Total SMSA	
			March 1976			
Median	n.a.	16,692	5,675	n.a.	14,909	5,432
Error	n.a.	404	441	n.a.	60	60
Mean	n.a.	18,515	7,355	n.a.	16,685	7,135
Error	n.a.	422	308	n.a.	63	56
			March 1977			
Median	15,123	18,741	6,644	13,952	16,001	5,[illegible]20
Error	622	471	610	103	65	59
Mean	15,226	20,582	8,593	16,017	18,019	7,768
Error	594	439	398	105	69	64
			March 1978			
Median	17,991	20,720	5,736	14,933	17,371	6,449
Error	1,303	525	440	732	110	92
Mean	18,077	22,296	8,359	21,720	19,579	8,536
Error	894	812	602	726	106	99
			March 1979			
Median	17,931	22,692	8,592	16,267	18,910	7,368
Error	1,057	1,024	1,469	214	144	120
Mean	19,476	25,278	11,445	19,027	21,431	9,498
Error	1,335	898	1,023	226	145	126

SOURCE: Bureau of the Census, Current Population Reports, Serices P-60, No. 123 (Washington, D.C.: 1980), Table 19; and similar reports for previous years.

NOTE: The surveys were conducted in March 1976, 1977, 1978, and 1979. The income data pertain to 1975, 1976, 1977, and 1978. Median income is that of the middle item in a ranking, highest to lowest, in income. Mean income is the arithmetic average, that is, total income received by all units divided by the number of units. The family consists of two or more related individuals living together. Error is a measure of sampling variability, that is, of the variations that occurred by chance because a sample rather than the whole population was surveyed. The chances are about 68 our of 100 that an estimate from the survey differs from what the complete census figure would have been by less than the standard error.

TABLE VI-18. PREVIOUS YEAR'S MONEY INCOME SIZE DISTRIBUTION AMONG FAMILIES AND UNRELATED INDIVIDUALS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA AND IN ALL U.S. STANDARD METROPOLITAN STATISTICAL AREAS: 1978 AND 1979

	March 1978			March 1979		
	Families		Unrelated individuals, total SMSA	Families		Unrelated individuals, total SMSA
Income class	Inside central city	Total SMSA		Inside central city	Total SMSA	
	Detroit, number of families and unrelated individuals (000)					
Less than $3,000	12	19	92	4	18	80
3,000-4,999	21	38	67	22	39	47
5,000-6,999	15	49	57	25	49	34
7,000-9,999	16	66	34	21	45	43
10,000-11,999	22	68	28	19	50	13
12,000-14,999	31	82	14	25	73	35
15,000-19,999	55	177	58	63	182	64
20,000-24,999	48	185	8	47	156	44
25,000 and over	67	383	14	84	486	18
Total	287	1,066	371	310	1,097	378
	U.S., number of familes and unrelated individuals (000)					
Less than $3,000	635	1,108	3,292	643	1,106	2,932
3,000-4,999	1,159	1,890	3,421	1,062	1,674	3,460
5,000-6,999	1,321	2,482	2,268	1,080	2,045	2,321
7,000-9,999	1,813	3,782	2,577	1,675	3,401	2,823
10,000-11,999	1,087	2,434	1,343	1,055	2,393	1,590
12,000-14,999	1,701	3,953	1,493	1,580	3,526	1,622
15,000-19,999	2,515	6,663	1,416	2,602	6,441	1,878
20,000-24,999	2,016	5,603	480	2,012	5,706	800
25,000 and over	3,112	9,926	542	3,924	12,289	768
Total	15,360	37,841	16,832	15,632	38,581	18,195

SOURCE: Bureau of the Census, Current Population Reports, Consumer Income, Series P-60, no. 123 (Washington, D.C.: 1980), Table 19; and a similar table for the previous year.

NOTE: The surveys were conducted in March 1978 and 1979. The income data pertain to 1977 and 1978. Median income is that of the middle item in a ranking, highest to lowest, in income. Mean income is the arithmetic average, that is, total income received by all units divided by the number of units. A family consists of two or more related individuals living together. Error is a measure of sampling variability, that is, of the variations that occurred by chance because a sample rather than the whole population was surveyed. The chances are about 68 out of 100 that an estimate from the survey differs from what the complete census figure would have been by less than the standard error.

TABLE VI-19. PREVIOUS YEAR'S POVERTY AMONG PERSONS AND FAMILIES IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA AND IN ALL U.S. STANDARD METROPOLITAN STATISTICAL AREAS: CENSUS 1970, MARCH 1977 MARCH 1978, AND March 1979

Item and year	Persons			Families		
	Inside central city	Outside central city	Total	Inside central city	Outside central city	Total
Detroit SMSA						
Number below poverty threshold (000)						
1970	222	130	352	42	26	68
1977	249	135	384	55	28	83
1978	174	142	316	34	31	65
1979	144	135	279	28	30	58
Poverty rate[a]						
1970	14.9	4.9	8.5	11.3	3.9	6.5
1977	20.4	n.a.	9.4	17.7	n.a.	7.8
1978	14.7	4.9	7.8	11.8	4.0	6.1
1979	12.1	4.5	6.6	9.1	3.8	5.3
All U.S. SMSAs						
Number below poverty threshold (000)						
1970	7,993	5,091	13,084	1,609	1,002	2,611
1977	9,482	5,747	15,229	1,961	1,276	3,237
1978	9,203	5,657	14,859	1,925	1,216	3,141
1979	9,285	5,805	15,090	1,983	1,222	3,205
Poverty rate[a]						
1970	12.7	6.8	9.5	9.8	5.3	7.4
1977	15.8	6.9	10.7	12.6	5.7	8.5
1978	15.4	6.8	13.9	12.5	5.4	8.3
1979	15.4	6.8	10.4	12.7	5.3	8.3

SOURCE: Bureau of the Census, U.S. Census of Population 1970, General Social and Economic Characteristics, Michigan (Washington, D.C.: 1972), Final Report PC(1)-C-24, Table 90, Current Population Reports, Series P-60, no. 124 (Washington, D.C.: 1980), Tables 4 and 10; and similar reports for 1977 and 1978.

a. Number below proverty threshold as a percentage of total population.

TABLE VI-20. CONSUMER PRICE INDEXES FOR WAGE EARNERS AND CLERICAL WORKERS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA AND THE URBAN UNITED STATES BY ITEM, ANNUAL AVERAGES: 1976-1980.

Items	1976		1977		1978		1979		1980	
	Detroit	United States	Detroit	United States	Detroit	United States	Detroit	United States	Detroit	United States
All items	168.9	170.5	180.4	181.5	194.1	195.3	218.7	217.7	252.1	247.0
Food	176.5	180.8	186.0	192.2	206.9	211.2	229.0	234.7	247.4	255.3
Food at home	173.3	179.5	183.5	190.2	205.0	209.9	228.3	232.5	248.8	251.2
Cereals & bakery products	184.5	180.6	193.7	183.5	209.9	200.5	230.0	220.8	257.3	246.9
Meats, poultry, fish, eggs	172.4	179.4	171.9	178.4	197.4	204.0	228.6	233.8	238.0	241.6
Dairy products	167.3	169.3	173.9	173.9	190.1	185.8	221.7	207.6	244.5	228.0
Fruits and vegetables	158.9	175.4	171.0	191.6	195.8	211.8	209.7	228.3	227.4	245.1
Other foods at home	184.5	189.9	215.3	224.1	245.3	189.5	258.0	208.5	295.6	231.2
Food away from home	186.4	186.1	199.2	200.3	220.3	218.3	240.1	244.4	254.4	270.1
Housing	173.2	177.2	184.6	189.6	196.3	206.6	228.7	227.5	277.0	263.2
Shelter	177.2	179.0	188.0	191.1	204.1	210.3	244.8	240.3	309.4	283.1
Rent	142.1	145.4	150.8	153.5	162.6	163.9	176.5	175.9	194.1	191.3
Homeownership	184.3	191.7	195.4	204.9	212.2	227.2	258.0	263.6	331.1	316.5
Fuel and utilities	182.8	182.7	205.7	202.2	224.5	216.1	249.6	239.7	286.0	279.2
Fuel oil and coal	248.6	250.8	285.7	283.4	309.0	298.3	424.7	403.6	571.3	557.2
Gas and electricity	197.7	188.9	223.0	213.4	247.0	232.6	277.4	257.6	320.0	301.2
Household furnishings and operation	156.6	168.5	160.5	177.0	159.3	177.0	172.5	188.9	181.3	202.9
Apparel and upkeep	142.0	147.6	146.7	154.2	151.9	159.5	151.7	166.4	158.3	177.4
Men's and boy's	151.5	147.2	154.3	154.0	152.6	157.5	149.5	161.4	153.1	168.8
Women's and girl's	128.1	141.9	130.9	146.4	142.2	149.1	136.5	151.3	141.8	154.9
Footwear	147.2	149.9	150.8	156.9	148.1	163.1	158.1	176.1	155.9	190.1
Transportation	160.2	165.5	174.7	177.3	184.2	185.8	208.8	212.8	242.9	250.5
Private	159.5	164.6	174.8	176.7	183.8	185.3	208.8	212.9	242.5	250.1
Public	168.6	174.2	172.6	182.4	194.9	188.1	210.4	200.0	256.4	245.3

TABLE VI-20. CONSUMER PRICE INDEXES FOR WAGE EARNERS AND CLERICAL WORKERS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA AND THE URBAN UNITED STATES BY ITEM, ANNUAL AVERAGES: 1976-1979 (cont.)

Items	1976		1977		1978		1979		1980	
	Detroit	United States	Detroit	United States	Detroit	United States	Detroit	United States	Detroit	United States
Health and recreation	173.6	163.3	186.8	173.7	--	--	--	--	--	--
Medical care	209.1	184.7	234.8	202.4	251.9	219.4	276.3	240.1	296.6	267.2
Personal care	160.7	160.5	172.6	170.9	181.5	182.0	191.0	195.5	207.8	212.7
Reading and recreation	152.2	151.2	156.9	157.9	--	--	--	--	--	--
Other goods and services	156.4	153.3	164.1	159.2	183.0	183.2	195.6	196.3	213.5	213.6

SOURCE: Michigan Department of Management and Budget, Economic Report of the Governor (Lansing: 1979), Table B-17, and Bureau of Labor Statistics, special release.

NOTE: Annual averages of monthly figures; 1967=100.

TABLE VI-22. ANNUAL COSTS OF A MODERATE STANDARD OF LIVING FOR A FAMILY OF FOUR IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA AND IN THE URBAN UNITED STATES, BY EXPENDITURE CATEGORY: AUTUMN 1978, 1979 AND 1980

Item	1978		1979		1980	
	Detroit	United States	Detroit	United States	Detroit	United States
Food	$ 4,546	$ 4,609	$ 5,005	$ 5,044	$ 5,520	$ 5,571
At home[a]	3,767	3,877	4,160	4,223	4,642	4,664
Away from home	779	732	845	821	878	907
Housing	4,326	4,182	4,716	4,594	5,230	5,106
Shelter[b]	3,464	3,226	3,804	3,573	4,268	3,998
Renter costs	2,025	2,165	2,233	2,340	2,408	2,533
Homeowner costs	3,943	3,580	4,327	3,983	4,888	4,486
Furnishings and operations	869	956	912	1,021	962	1,108
Transportation[c]	1,548	1,572	1,799	1,851	2,042	2,116
Automobile owners	1,610	1,653	1,872	1,949	2,122	2,225
Clothing	1,273	1,209	1,195	1,235	1,239	1,292
Personal care	426	403	452	433	501	471
Medical care	1,183	1,070	1,280	1,176	1,366	1,303
Other family consumption[d]	977	956	1,022	1,021	1,102	1,109
Total consumption	14,279	14,000	15,469	15,353	17,000	16,969
Other items[e]	820	810	881	877	958	957
Personal income taxes	2,975	2,738	3,196	3,031	3,789	3,781
Other payroll taxes[f]	1,071	1,073	1,275	1,256	1,421	1,427
TOTAL	19,145	18,622	20,821	20,517	23,168	23,134

SOURCE: Bureau of Labor Statistics, News, 29 April 1979, USDL release 79-305, Table 3, and 30 April 1980, USDL release 80-278 (Washington, D.C.:periodically).

NOTE: Family of four comprised of husband, 38, working full time, wife in the labor force, daughter, 8, and son, 13.

a. Nutritionally adequate diet varied according to different tastes indifferent regions.

b. Weighted average of homeowner costs (75 percent) and renter costs (25percent). Renter costs include heat and utilities; homeowner costs include heat and utilities and payments on 6-year-old mortgages.

c. Assumed 100 percent automobile ownership in areas of less than 1.4 million population.

d. Reading, recreation, tobacco products, alcoholic beverages, education, and miscellaneous expenditures.

e. Gifts and contributions, life insurance, and occupational expenses.

f. Social Security and disability.

TABLE VI-21. CONSUMER PRICE INDEX FOR THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, BY MONTH: 1960-1981

(1976 = 100)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
						Urban wage earners and clerical workers							
1960	87.1	87.5	87.5	87.6	87.7	88.3	88.8	88.7	88.5	88.7	88.7	88.8	88.2
1961	89.1	89.2	88.8	88.7	88.7	88.8	88.6	88.8	88.2	88.5	88.3	87.8	88.7
1962	88.0	88.8	88.8	88.9	88.8	88.6	88.7	89.0	89.5	89.5	89.3	89.2	88.9
1963	89.2	89.3	89.3	88.9	89.1	90.1	90.4	90.9	89.9	90.1	90.3	90.2	89.8
1964	90.3	89.7	90.2	90.3	89.8	90.2	90.7	90.8	91.0	91.3	91.0	91.2	90.5
1965	91.4	91.0	91.2	91.9	92.3	93.1	93.0	93.0	93.0	93.5	93.6	94.0	92.6
1966	94.3	94.7	95.4	95.9	96.3	96.8	96.9	97.4	97.6	98.0	98.1	98.6	96.7
1967	98.6	98.8	99.5	99.7	99.7	99.8	100.1	100.3	100.3	100.5	101.0	101.3	100.0
1968	101.5	102.1	102.9	103.1	103.5	104.3	104.7	105.0	105.5	105.9	106.3	106.6	104.3
1969	106.9	107.4	108.9	109.4	110.0	110.8	111.1	111.8	111.9	112.4	113.0	113.8	110.6
1970	114.1	115.1	115.8	116.4	117.4	117.7	117.9	117.8	118.4	119.3	119.9	119.5	117.4
1971	120.3	120.0	120.1	120.1	120.9	121.8	121.8	122.8	122.8	122.8	123.4	123.7	121.7
1972	124.2	124.9	125.0	125.0	125.5	126.0	126.7	126.9	127.3	127.2	127.4	128.3	126.2
1973	128.5	129.7	131.1	132.4	133.4	133.7	133.8	136.8	137.3	137.9	139.0	140.0	134.5
1974	141.5	143.8	144.9	145.4	146.4	148.4	149.4	150.9	152.4	153.8	155.2	156.0	149.0
1975	155.5	156.5	157.0	157.7	158.1	159.7	160.8	161.3	162.8	163.1	163.9	164.6	160.1
1976	165.7	165.8	165.6	166.4	167.3	168.0	169.2	169.7	171.3	171.4	172.5	173.1	168.8
1977	173.8	175.1	176.8	179.0	179.3	181.0	182.5	182.6	182.8	183.1	184.5	184.4	180.4
1978	185.0	185.8	187.9	189.8	192.1	194.6	194.7	196.2	198.2	200.7	201.7	201.9	194.1
1979	204.9	208.8	211.6	213.2	214.1	215.5	219.8	222.6	223.5	226.9	230.8	232.2	218.7
1980	236.4	239.9	242.4	248.0	248.9	255.8	252.1	253.8	257.7	261.4	263.6	265.5	252.1
1981	264.4	265.5	263.6	268.0	271.3	275.9	278.9	279.1	280.2	278.2	276.4	275.1	273.1
						All urban consumers							
1978	185.0	185.6	188.4	190.2	192.3	194.5	194.6	195.8	197.7	200.9	202.0	202.2	194.1
1979	205.1	208.8	211.6	213.2	213.9	215.4	219.5	222.2	223.7	227.2	231.3	233.2	218.8
1980	237.2	240.4	242.9	248.2	248.4	256.7	253.7	255.1	259.5	264.3	266.4	269.7	253.5
1981	268.5	270.2	268.2	272.4	275.2	280.5	283.1	283.5	284.2	281.5	279.6	278.3	277.1

SOURCE: Bureau of Labor Statistics, special release.

TABLE VI-23. ANNUAL COSTS OF A MODERATE STANDARD OF LIVING FOR A RETIRED COUPLE IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA AND IN THE URBAN UNITED STATES, BY EXPENDITURE CATEGORY: AUTUMN 1979 AND 1980

	1978		1979		1980	
Item	Detroit	United States[a]	Detroit	United States[a]	Detroit	United States[a]
Food	2,239	2,299	2,467	2,507	2,733	2,772
At home[b]	1,994	2,052	2,201	2,231	2,457	2,467
Away from home	245	247	266	276	276	305
Housing	2,682	2,641	2,938	2,862	3,182	3,106
Shelter	1,728	1,689	1,929	1,845	2,118	2,001
Renter costs[c]	1,773	1,690	1,955	1,824	2,108	1,975
Homeowner costs	1,703	1,689	1,915	1,857	2,123	2,015
Furnishings and operations	954	952	1,009	1,017	1,064	1,104
Transportation	766	701	886	820	1,017	950
Automobile owners[d]						
Clothing	397	369	374	378	388	396
Personal care	224	229	237	247	263	269
Medical care	777	769	846	842	942	950
Other family consumption[e]	401	479	421	390	453	424
Total consumption	7,486	7,374	8,169	8,047	19,124	18,734
Other items[f]	479	472	523	515	575	568
TOTAL costs	7,965	7,846	8,692	8,562	19,499	19,302

SOURCE: Bureau of Labor Statistics, News, 25 August 1980 and 10 August 1981 (Washington, D.C.: periodically), USDL release 80-517, Table 2.

NOTE: The retired couple is assumed to be a husband, aged 65 or older, and his wife. They are assumed to be self-supporting and living in an urban area; they are in reasonably good health and take care of themselves.

a. Weighted average of 56 urban areas.

b. Nutritionally adequate diet varied according to different tastes in different regions.

c. Weighted average of homeowner costs (65 percent) and renter costs (35 percent). Renter costs include heat and utilities; homeowner costs include heat and utilities and payments on 6-year-old mortgages.

d. Assumed 100 percent automobile ownership in areas of more than 1.4 million population.

e. Reading, recreation, tobacco products, alcoholic beverages, and miscellaneous expenditures.

f. Gifts and contribution.

TABLE VI-24. TREND IN ANNUAL TOTAL BUDGET COSTS AT THREE LEVELS FOR A FAMILY OF FOUR AND A RETIRED COUPLE IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA AND IN THE URBAN UNITED STATES: 1971-1979

	Family of four			Retired couple		
Year	Low	Medium	High	Low	Medium	High
			Detroit			
1971	$ 7,074	$10,754	$15,065	$ 3,298	$ 4,784	$ 7,756
1972	7,271	11,502	16,749	3,439	5,006	8,104
1973	8,246	12,810	18,591	3,780	5,484	8,458
1974	9,138	14,390	21,142	4,267	6,116	9,489
1975	9,501	15,701	22,947	4,506	6,515	10,077
1976	9,865	16,514	24,226	4,661	6,731	10,465
1977	10,400	17,427	25,550	5,020	7,214	11,188
1978	11,596	19,145	28,172	5,577	7,965	12,265
1979	12,582	20,821	30,668	6,102	8,692	13,377
1980	13,939	23,168	34,268	6,734	9,553	14,634
			Urban United States			
1971	7,214	10,971	15,905	3,319	4,776	7,443
1972	7,386	11,446	16,558	3,442	4,967	7,689
1973	8,181	12,626	18,201	3,763	5,414	8,043
1974	9,198	14,333	20,777	4,228	6,041	8,969
1975	9,588	15,318	22,294	4,501	6,465	9,598
1976	10,041	16,236	23,759	4,695	6,738	10,048
1977	10,481	17,106	25,202	5,031	7,198	10,711
1978	11,546	18,622	27,420	5,514	7,846	11,596
1979	12,585	20,517	30,317	6,023	8,562	12,669
1980	14,044	23,134	34,409	6,644	9,434	13,923

SOURCE: Bureau of Labor Statistics, News, 22 April 1981 (Washington, D.C.: periodically), and similar releases for previous years.

n.a.: not available.

VII. SOCIAL WELFARE

The Michigan Department of Social Services, charged with the responsibility for administering the state's public welfare and related programs, conducts research and functions as the repository of relevant data. Published sources include the Annual Report and the monthly publication, Social Service Statistics.

Information related to other social welfare programs is available from annual reports of the various agencies that administer them, for example, the Social Security Administration, the Veterans Administration, and the Railroad Retirement Board.

Data for Tables VII-1 and VII-2 were drawn from the tabulations released by the Bureau of Economic Analysis in conjunction with its personal income statistics program. A more complete statement of those data is included at the beginning of chapter VI.

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TABLE VII-1. TRANSFER PAYMENTS IN MICHIGAN AND THE UNITED STATES: 1958-1980

(In millions of dollars)

Year	Michigan	United States	Michigan as a percentage of the United States
1958	1,254	25,978	4.83
1959	1,154	27,064	4.26
1960	1,207	28,940	4.17
1961	1,425	32,817	4.34
1962	1,384	33,770	4.10
1963	1,411	35,838	3.94
1964	1,459	37,430	3.90
1965	1,575	40,414	3.90
1966	1,746	44,667	3.91
1967	2,079	52,595	3.95
1968	2,346	59,920	3.92
1969[a]	2,601	66,650	3.90
1970[a]	3,244	80,149	4.05
1971[a]	3,844	94,435	4.07
1972[a]	4,322	104,681	4.13
1973[a]	4,816	119,512	4.03
1974[a]	5,973	141,221	4.23
1975[a]	7,836	178,308	4.39
1976[a]	8,131	194,273	4.19
1977[a]	8,422	207,472	4.06
1978[a]	8,854	223,272	3.97
1979[a]	10,170	249,392	4.08
1980	13,258	294,240	4.51

SOURCE: Bureau of Economic Analysis, Regional Economics Information System; and U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business (Washington, D.C.: Monthly), July 1981, Vol. 61, Table 3 and p. 29.

NOTE: See Table VII-2 for listing of items comprising transfer payments.

a. Estimates for 1969-1980 have been revised to reflect the 1980 comprehensive NIPA revisions.

TABLE VII-2. TRANSFER PAYMENTS RECEIVED BY MICHIGAN AND UNITED STATES RESIDENTS, BY ITEM: 1979 AND 1980[a]

(In millions of dollars)

Item	Michigan		United States	
	1979	1980	1979	1980
Old Age, Survivors, and Disability Insurance	4,333	5,009	102,581	118,654
Railroad retirement and disability	97	107	4,313	4,801
Federal employees retirement	189	227	12,952	15,504
State and local gov't employees retirement	491	547	13,380	14,880
Medical insurance payments[b]	1,353	1,624	29,538	35,448
Workmen's compensation[c]	73	82	2,558	2,820
Black lung	21	22	1,726	1,749
Other government disability, insurance, and retirement programs[d]	6	6	699	719
Total government retirement, disability, and insurance programs	6,558	7,618	167,747	194,575
State unemployment insurance programs	645	1,454	9,100	15,368
Unemployment insurance payments to federal gov't civilian employees	4	4	163	176
Unemployment insurance payments to railroad employees	6	15	143	246
Trade adjustment assistance payments	69	786	269	2,131
Public service and jobless benefits[e]	13	20	361	173
Total unemployment insurance payments, excluding those to veterans under special veterans programs	752	2,296	10,321	18,428
Educational and training assistance payments[f]	87	112	2,819	3,609
Supplemental security income	222	238	7,075	7,980
Aid to families with dependent children	899	1,064	11,114	12,603
General assistance program	129	189	1,228	1,404
Emergency assistance	15	17	77	107
Bonus value of food stamps	196	280	6,311	8,156
Other assistance payments[g]	26	39	1,104	1,617
Total income maintenance programs	1,486	1,827	26,909	31,867
Other government transfer payments[h]	2	24	304	647
Total governments payments to individual civilians	8,886	11,877	208,100	249,126

TABLE VII-2. TRANSFER PAYMENTS RECEIVED BY MICHIGAN AND UNITED STATES RESIDENTS, BY ITEM: 1979 AND 1980 (cont.)

(In millions of dollars)

Item	Michigan		United States	
	1979	1980	1979	1980
Pensions, retirement pay, terminal leave, and mustering out pay of military personnel	446	487	21,051	23,590
Unemployment insurance for veterans	15	18	285	334
Educational payments to veterans and their dependents and survivors	70	60	2,436	2,047
Military life insurance benefit payments	32	34	1,065	1,198
Other government payments to veterans[i]	6	6	223	212
Total government payments to retired military personnel, veterans, and dependents	554	588	167,747	194,575
Payments to nonprofit institutions	366	391	8,644	9,352
Business transfer payments	364	403	7,873	8,715
Total transfer payments	10,170	13,258	249,392	294,240

SOURCE: Bureau of Economic Analysis, Regional Economic Information System.

a. Estimates for 1969-80 have been revised to reflect the 1980 comprehensive NIPA revisions.
b. Medicare.
c. Compensation to disabled government employees.
d. Payments to beneficiaries of state disability programs and beneficiares of the Panama Canal Construction Annuity Act.
e. Public service employment, redwood benefits, and transitional employment.
f. National Science Foundation fellowships; other federal fellowships; subsistence of state marine school cadets; higher education loans - interest subsidy payments; basic education opportunity grants; area redevelopment payments, Manpower Development, Training and Assistance Act payments; and Job Corps payments.
g. Refugee Assistance payments (includes Cuban and Southeast Asia refugees), Civilian War Assistance and Enemy Aliens Act payments, foster home care in public facilities, special federal payments to selected individuals, and payments for earned income tax credit.
h. Bureau of Indian Affairs payments, education exchange, and payments for Alaska Native Claims Settlement Act.
i. Payments to paraplegics, for automobiles for disabled veterans, to war orphans, to children of disabled veterans, to prisoners of war; veterans' aid; and veterans' bonus payments by state and local government.

TABLE VII-3. ESTIMATED NUMBER AND PROPORTION OF THE POPULATION AGED 65 AND OLDER RECEIVING OASDHI CASH BENEFITS AND SSI PAYMENTS, MICHIGAN AND THE UNITED STATES: DECEMBER 1966-1979

	OASDHI[a]		SSI[b]		Both	
Year	Michigan	United States	Michigan	United States	Michigan	United States
			Number (in thousands)			
1966	634	15,611	40	2,069	--	1,007
1967	656	16,081	40	2,069	--	1,096
1968	667	16,490	38	2,024	--	1,169
1969	679	16,884	38	2,072	--	1,181
1970	695	17,374	40	2,081	--	1,243
1971	710	17,900	41	2,024	--	1,127
1972	724	18,482	41	1,933	--	1,276
1973	747	19,269	38	1,820	--	1,189
1974	763	19,834	49	2,286	--	1,483
1975	782	20,449	52	2,307	36	1,603
1976	799	21,043	47	2,148	33	1,495
1977	818	21,731	54	2,353	38	1,645
1978	837	22,365	53	2,311	37	1,624
1979[c]	858	22,809	52	2,269	37	1,036
			Proportion[d]			
1966	878	822	55	110	30	55
1967	863	839	52	108	29	58
1968	874	846	49	104	27	58
1969	897	854	50	105	39	61
1970	911	848	45	101	30	63
1971	915	853	53	96	31	62
1972	918	865	52	90	33	61
1973	941	884	48	84	31	56
1974	946	888	61	103	40	68
1975	951	901	63	102	44	71
1976	947	906	56	92	39	64
1977	952	913	62	99	44	69
1978	953	918	60	95	43	67
1979	967	925	59	92	42	64

SOURCE: Social Security Administration, Social Security Bulletin, December 1968 through October 1979 (Washington, D.C.: monthly), vol. 42, No. 12 (October 1979): Tables M-25, M-26, and Q-4.

a. Old age, survivors, disability, and health insurance program of the federal government (Social Security).

b. For 1965-1973, data refer to old age assistance program; beginning January 1974, the supplemental security income program superseded the old age assistance program in the 50 states and District of Columbia.

c. Population data, on which figures are based, is from the U.S. Bureau of the Census, Current Population Reports, series P-25, No. 875.

d. Number per 1,000 population aged 65 and over.

TABLE VII-4. AMOUNT OF OASDHI CASH BENEFITS PAID IN MICHIGAN AND THE UNITED STATES, BY TYPE OF PROGRAM: 1972-1979

(In millions of dollars)

Program	1972	1973	1974	1975	1976	1977	1978	1979
Michigan								
Old age & survivors insurance	1,575	1,928	2,207	2,443	2,728	3,010	3,284	4,199
Monthly benefits	1,562	1,915	2,195	2,430	2,715	2,998	3,271	3,605
Retired workers	998	1,195	1,386	1,536	1,724	1,913	2,103	2,327
Dependents	128	151	171	188	207	223	247	271
Survivors	427	560	631	701	778	857	916	1,007
Special age-72	9	8	7	6	5	5	4	n.a
Lump sum death payments	13	14	13	13	13	12	13	n.a.
Disability insurance								
Monthly benefits	200	260	319	387	460	511	550	590
Disabled workers	161	212	261	317	376	420	452	484
Dependents	38	48	58	71	84	91	98	105
United States								
Old age & survivors insurance	37,122	45,741	51,618	58,509	65,699	73,113	80,352	101,020
Monthly benefits	36,802	45,412	51,291	58,172	65,366	72,801	80,008	87,461
Retired workers	24,230	29,351	33,367	38,094	43,057	48,134	53,255	53,342
Dependents	2,887	3,467	3,848	4,352	4,837	5,300	5,904	6,374
Survivors	9,418	12,328	13,839	15,526	17,297	19,210	20,707	22,745
Special age-72	266	267	237	198	174	157	142	n.a.
Lump sum death payments	320	329	327	337	332	312	344	n.a.
Disability insurance								
Monthly benefits	4,473	5,718	6,903	8,414	9,966	11,463	12,513	13,429
Disabled workers	3,626	4,676	5,662	6,908	8,190	9,456	10,315	11,090
Dependents	847	1,042	1,240	1,506	1,776	2,006	2,198	2,338

SOURCE: Social Security Administration, Social Security Bulletin, December 1972 through December, 1980 (Washington, D.C.: monthly), Tables Q-15 or Q-16.

TABLE VII-5. NUMBER OF MONTHLY OASDHI CASH BENEFITS IN CURRENT-PAYMENT STATUS, BY TYPE OF BENEFICIARY, MICHIGAN AND THE UNITED STATES: DECEMBER 1970-1979

Year	Retired workers	Disabled workers	Spouses of: Retired workers	Spouses of: Disabled workers	Children of: Retired workers	Children of: Deceased workers	Children of: Disabled workers	Widowed parents	Widows and widowers	Total
					Michigan					
1970	544	58	111	10	20	112	34	21	138	1,050
1971	544	66	111	12	21	116	38	21	143	1,088
1972	561	75	111	14	21	119	44	22	148	1,128
1973	585	84	112	15	22	122	48	23	153	1,175
1974	603	95	112	17	22	122	53	23	157	1,213
1975	625	105	113	19	23	123	59	24	161	1,258
1976	643	112	114	19	23	123	62	24	164	1,291
1977	662	116	115	20	25	120	62	24	168	1,317
1978	678	116	115	19	23	115	60	23	171	1,325
1979	689	115	114	19	23	115	59	23	173	1,334
					United States					
1970	13,870	1,492	2,681	283	542	2,691	888	523	3,227	26,228
1971	13,927	1,648	2,698	312	562	2,775	971	535	3,366	27,292
1972	14,555	1,832	2,734	350	582	2,845	1,088	540	3,509	28,476
1973	15,365	2,016	2,808	381	613	2,912	1,161	572	3,656	29,869
1974	15,958	2,237	2,826	412	619	2,893	1,263	574	3,770	30,853
1975	16,588	2,489	2,867	453	643	2,919	1,411	582	3,889	32,085
1976	17,165	2,670	2,896	474	653	2,903	1,480	579	3,995	33,023
1977	17,821	2,838	2,961	495	695	2,860	1,528	583	4,120	34,079
1978	18,358	2,880	2,980	492	661	2,780	1,497	576	4,212	34,586
1979	18,591	2,878	2,966	483	645	2,745	1,466	567	4,260	34,739

SOURCE: Social Security Administration, Social Security Bulletin, December 1971 through December 1980 (Washington, D.C.: monthly), vol. 42, no. 12 (December 1979), Table Q-14.

TABLE VII-6. NUMBER AND AVERAGE MONTHLY BENEFITS OF RETIRED WORKERS UNDER OASDHI, MICHIGAN AND THE UNITED STATES: DECEMBER 1969-1979

	Number (In thousands)		Amount	
Year	Michigan	United States	Michigan	United States
1969	537	12,822	125.62	100.40
1970	548	13,349	127.41	118.10
1971	544	13,927	144.61	132.17
1972	561	14,555	177.18	162.35
1973	585	15,365	180.80	166.40
1974	603	15,959	204.17	188.20
1975	625	16,588	224.42	207.18
1976	643	17,165	243.08	224.86
1977	662	17,821	262.11	242.98
1978	678	18,358	n.a.	263.19
1979	689	18,591	n.a.	294.27

SOURCE: Social Security Administration, Social Security Bulletin, December 1970 through December 1980 (Washington, D.C.: monthly), vol. 42, no. 12 (December 1980): Tables M-10, M-13, Q-13, and Q-14.
n.a.: not available.

TABLE VII-7. NUMBER OF RECIPIENTS AND AVERAGE MONTHLY CASH BENEFITS UNDER AID TO FAMILIES WITH DEPENDENT CHILDREN, MICHIGAN AND THE UNITED STATES: DECEMBER 1967-1979

	Number (In thousands)		Amount	
Year	Michigan	United States	Michigan	United States
1967	183	5,309	44.40	39.50
1968	201	6,086	46.75	44.75
1969	246	7,313	56.90	45.15
1970	445	9,659	53.80	50.30
1971	507	10,653	63.28	52.30
1972	590	11,069	67.96	54.10
1973	600	10,815	74.03	56.95
1974	642	11,006	80.14	64.85
1975	676	11,383	88.43	71.72
1976	653	11,184	92.28	75.48
1977	623	10,761	99.08	79.46
1978	620	10,325	115.80	86.33
1979	638	10,316	122.37	93.09

SOURCE: Social Security Administration, Social Security Bulletin, June 1975 through June 1980 (Washington, D.C.: monthly), vol. 42, no. 6 (June 1980): Table M-35.

TABLE VII-8. NUMBER OF RECIPIENTS AND AVERAGE MONTHLY CASH BENEFITS UNDER GENERAL ASSISTANCE, MICHIGAN AND THE UNITED STATES: DECEMBER 1967-1979

	Number (in thousands)		Amount	
Year	Michigan	United States	Michigan	United States
1967	65	782	$ 35.75	$ 39.45
1968	75	826	35.00	49.15
1969	69	860	43.50	50.25
1970	113	1,056	44.60	57.85
1971	85	982	72.79	64.80
1972	63	865	96.13	72.10
1973	49	700	122.26	81.95
1974	67	851	121.92	96.35
1975	76	977	130.66	102.07
1976	66	903	143.85	116.36
1977	51	819	147.24	125.35
1978	53	762	161.29	128.11
1979	84	885	161.33	123.31

SOURCE: Social Security Administration, Social Security Bulletin, June 1973 through June 1980 (Washington, D.C.: monthly), vol. 42, no. 6 (June 1980): Table M-39.

TABLE VII-9. NUMBER OF RECIPIENTS AND AVERAGE MONTHLY CASH BENEFITS UNDER OLD AGE ASSISTANCE, MICHIGAN AND THE UNITED STATES: DECEMBER 1967-1979

	Number (in thousands)		Amount	
Year	Michigan	United States	Michigan	United States
1967	40	2,073	$ 69.40	$ 70.15
1968	38	2,027	70.55	69.55
1969	38	2,074	73.60	73.90
1970	40	2,082	77.30	77.65
1971	41	2,024	80.10	77.50
1972	41	1,934	70.68	79.95
1973	38	1,820	73.85	76.15
1974	49	2,285	94.62	91.09
1975	52	2,307	98.72	90.93
1976	47	2,148	100.77	94.35
1977	45	2,051	107.45	96.62
1978	43	1,968	116.29	100.43
1979	41	1,872	127.05	122.65

SOURCE: Social Security Administration, Social Security Bulletin, April 1975 through April 1980 (Washington, D.C.: monthly), vol. 42, no. 4 (April 1980): Tables M-25, M-27, and M-28.

NOTE: For 1967 to 1973, data refer to old age assistance program; beginning in January 1974, the supplemental security income program superseded the old age assistance program in the 50 states and District of Columbia.

TABLE VII-10. NUMBER OF RECIPIENTS AND AVERAGE MONTHLY CASH BENEFITS UNDER AID TO THE BLIND, MICHIGAN AND THE UNITED STATES: DECEMBER 1967-1979

Year	Number		Amount	
	Michigan	United States	Michigan	United States
1967	1,500	82,600	$ 86.40	$ 90.45
1968	1,400	80,700	91.65	92.15
1969	1,400	80,300	95.80	98.75
1970	1,400	81,000	106.45	104.35
1971	1,555	80,343	112.08	106.39
1972	1,676	79,791	114.27	112.85
1973	1,717	77,882	113.15	112.00
1974	1,705	74,616	143.64	140.57
1975	1,681	74,489	149.05	146.57
1976	1,588	76,366	148.37	152.78
1977	1,659	77,362	159.41	159.20
1978	1,715	77,135	170.85	164.40
1979	1,772	77,250	188.12	212.27

SOURCE: Social Security Administration, Social Security Bulletin, April 1975 through April 1979 (Washington, D.C.: monthly), vol. 42, no. 4 (April 1980): Tables M-25 and M-28.

TABLE VII-11. NUMBER OF RECIPIENTS AND AVERAGE MONTHLY CASH BENEFITS UNDER AID TO THE PERMANENTLY AND TOTALLY DISABLED, MICHIGAN AND THE UNITED STATES: DECEMBER 1967-1979

Year	Number		Amount	
	Michigan	United States	Michigan	United States
1967	18,000	646,000	$ 84.60	$ 80.60
1968	21,000	703,000	91.15	82.65
1969	24,700	803,000	96.00	90.15
1970	30,000	933,000	105.75	97.65
1971	37,689	1,068,383	111.29	102.25
1972	47,883	1,167,906	111.29	106.15
1973	53,687	1,274,982	121.56	109.75
1974	60,287	1,635,539	147.05	141.90
1975	66,105	1,932,681	151.38	141.15
1976	68,253	2,011,876	153.66	145.50
1977	71,074	2,109,409	160.53	150.36
1978	73,234	2,171,890	175.07	154.82
1979	74,142	2,200,609	195.35	181.71

SOURCE: Social Security Administration, Social Security Bulletin, April 1976 through April 1980 (Washington, D.C.: monthly), vol. 42, no. 4 (April 1980): Tables M-25, and M-28.

TABLE VII-12. ESTIMATED EXPENDITURES IN MICHIGAN BY THE VETERANS ADMINISTRATION: FISCAL YEARS 1973-1979

(In millions of dollars)

Item	1973	1974	1975	1976	1977	1978	1979
Compensation and pensions	219.8	221.8	245.3	264.7	282.7	296.1	315.8
Vocational rehabilitation and education	97.9	115.7	171.9	204.0	124.8	101.0	77.0
Direct loans	.18	.1	.1	.1	.1	.09	.07
Insurance and indemnities	22.3	25.6	29.4	26.8	30.3	29.4	32.7
Hospital and domiciliary construction	.7	2.4	3.9	2.2	1.2	2.1	1.8
Administrative costs and other benefits	88.5	84.3	95.7	108.9	122.4	135.7	149.2
Total	430.1	450.5	546.4	606.6	561.6	564.3	576.6

SOURCE: Administrator of Veterans Affairs, Annual Report, 1973 through 1979 (Washington, D.C.: annually), Table 87 (1979).

TABLE VII-13. BENEFITS PAID IN MICHIGAN UNDER THE RAILROAD RETIREMENT AND UNEMPLOYMENT INSURANCE ACTS, BY CLASS OF BENEFIT: FISCAL YEARS 1967-1979

(In thousands of dollars)

Year	Retirement	Survivor	Unemployment	Sickness	Total
1967	22,920	7,983	778	924	32,605
1968	25,455	8,562	948	843	35,807
1969	27,594	9,461	995	1,464	39,513
1970	28,007	10,079	957	1,510	40,553
1971	33,828	11,520	1,974	1,494	48,817
1972	37,395	12,514	2,630	1,226	53,766
1973	42,249	14,961	1,681	1,095	59,988
1974	44,761	16,658	1,010	905	63,334
1975	50,429	19,381	2,047	952	72,809
1976	55,276	22,753	4,625	2,692	85,346
1977	59,764	24,575	3,419	2,709	90,466
1978	62,536	25,733	4,042	2,517	94,829
1979	67,127	27,326	2,762	2,381	99,596

SOURCE: Railroad Retirement Board, Annual Report 1967 through 1979 (Washington, D.C.: annually), Table 7 (1979).

TABLE VII-14. NUMBER OF FOOD STAMP RECIPIENTS IN MICHIGAN, FISCAL YEARS: 1971-1980

(Monthly average number of persons)

Year	Total	In public assistance households	In nonpublic assistance households
1971	514,234	305,030	209,204
1972	564,309	414,955	149,354
1973	539,715	427,375	112,340
1974	533,225	429,516	103,709
1975	642,412	473,839	168,573
1976	681,979	500,356	181,623
1977	631,748	490,984	140,764
1978	567,692	441,412	126,280
1979	633,550	480,760	152,790
1980	813,102	588,328	224,774

SOURCE: Michigan Department of Social Services, Data Reporting Section, special release.

TABLE VII-15. VALUE OF FOOD STAMPS ISSUED IN MICHIGAN, FISCAL YEARS: 1971-1980

Year	Total value[a] ($000)	Purchase value[b] ($000)	Bonus value[c] ($000)	Percentage of bonus value to total value	Average bonus per person
1971	141,129	66,549	74,580	52.8	12.09
1972	160,662	84,097	76,565	47.7	11.31
1973	157,637	91,482	66,155	42.0	10.21
1974	180,063	100,310	79,753	44.3	12.46
1975	257,212	133,869	123,343	48.0	16.00
1976	299,442	155,765	143,677	48.0	17.56
1977	285,500	153,314	132,186	46.3	17.46
1978	270,400	145,575	124,925	46.2	18.36
1979	210,000	--	210,000	--	--
1980	262,764	--	262,764	--	--

SOURCE: Michigan Department of Social Services, Data Reporting Section, special release.

a. Available for food purchases.
b. Purchase requirement for recipients. New federal regulations eliminate the purchase requirement effective 1 January 1979.
c. Difference between value and purchase requirement. The change in federal regulations effective fiscal year 1979 also eliminates the distinction between total value of coupons and the bonus value.

TABLE VII-16. MEDICAL ASSISTANCE (MEDICAID) RECIPIENTS AND EXPENDITURES FOR MEDICAL ASSISTANCE IN MICHIGAN, BY TYPE OF CASE AND TYPE OF SERVICE, FISCAL YEARS: 1979 AND 1980

Classification	Year	Recipients[a]	Expenditures	Average per recipient
		Type of case		
Age 65 and over	1979	90,927	253,223,725	2,784.91
	1980	94,050	277,147,069	2,946.82
Blind	1979	1,723	3,504,347	2,033.86
	1980	1,741	3,590,949	2,062.58
Disabled	1979	105,573	372,899,592	3,532.15
	1980	108,855	355,052,324	3,261.70
Dependent children under age 21	1979	454,493	116,027,134	365.30
	1980	493,953	172,506,806	349.24
Adults in families with dependent children	1979	235,918	226,218,338	958.89
	1980	266,830	253,443,863	949.83
Other children under age 21	1979	9,032	14,528,539	1,608.56
	1980	8,014	9,938,986	1,240.20
		Type of service		
Inpatient general hospital services	1979	147,673	342,846,567	2,321.66
	1980	153,118	352,511,023	2,302.22
Inpatient mental hospital services	1979	7,399	41,775,825	5,646.14
	1980	7,011	24,060,422	3,431.81
Skilled nursing home serv.	1979	30,057	161,433,789	4,370.92
	1980	26,927	133,824,028	4,969.88
Intermediate care services:				
Mentally retarded	1979	5,511	109,870,818	19,936.64
	1980	5,363	101,870,244	18,995.01
Other	1979	24,008	122,053,728	5,083.88
	1980	31,966	161,194,533	5,042.69
Physicians' services	1979	728,187	120,666,939	165.71
	1980	778,976	139,113,192	178.58
Dental services	1979	196,291	19,301,589	98.31
	1980	224,201	22,398,946	99.91
Other practitioners' serv.	1979	145,245	8,389,158	57.76
	1980	151,580	8,267,961	54.55
Outpatient hosp. serv.	1979	387,669	21,604,094	55.73
	1980	413,741	23,334,114	56.40
Clinic services	1979	21,602	688,402	31.87
	1980	25,834	1,280,185	49.55
Lab. & radiological serv.	1979	181,247	11,713,476	64.63
	1980	201,344	13,473,797	66.92
Home health serv.	1979	4,343	2,088,400	480.88
	1980	5,380	2,917,709	542.34
Prescribed drugs	1979	659,088	59,435,780	90.18
	1980	729,394	69,755,452	95.63
Family planning serv.	1979	116,333	6,167,220	53.01
	1980	121,888	7,810,148	64.08
Other care	1979	80,841	8,365,822	103.41
	1980	86,945	9,869,154	113.51
TOTAL	1979	897,666	1,036,401,675	1,154.55
	1980	973,433	1,071,680,997	1,100.92

SOURCE: Michigan Department of Social Services, *Medical Assistance (Medicaid) Fiscal Year 1979* (Lansing: 1980), Table 1, and *Medical Assistance (Medicaid) Fiscal Year 1980* (Lansing: 1981), Table 1.

a. The sum of recipients by type of service adds to more than the total because more than one type of service was provided to many recipients.

TABLE VII-17. SUMMARY OF MICHIGAN PUBLIC ASSISTANCE: JANUARY 1980 AND 1981

Program	1980	1981	Percentage change
Persons or cases			
Aid to families with dependent children			
Number of families			
Unemployed parent	17,283	36,025	+108.4
Regular segment	193,711	206,857	+ 6.8
Number of recipients			
Unemployed parent	76,386	152,005	+ 98.9
Regular segment	574,045	602,026	+ 4.9
General assistance			
Cases with children	4,284	5,382	+ 25.6
Cases without children	67,827	103,202	+ 52.1
Number of recipients	86,677	126,980	+ 46.5
Emergency assistance			
Families receiving AFDC	3,155	3,859	+ 22.3
Families not receiving AFDC	1,363	1,397	+ 2.5
Recipients receiving AFDC	11,021	14,103	+ 28.0
Recipients not receiving AFDC	4,937	5,154	+ 4.4
Food Stamps			
Households receiving other public assistance	200,172	267,428	+ 33.6
Households not receiving other public assistance	99,176	110,248	+ 11.2
Recipients receiving other public assistance	549,566	698,924	+ 27.2
Recipients not receiving other public assistance	217,867	227,786	+ 4.5
Total recipients of money payments	951,393	1,103,006	+ 15.9
Amounts ($000)			
Aid to families with dependent children			
Unemployed parent	7,688.8	16,223.6	+111.0
Regular segment	70,015.6	77,337.3	+ 10.5
General assistance	13,747.6	19,528.2	+ 42.0
Emergency assistance			
Receiving AFDC	674.3	924.8	+ 37.1
Not receiving AFDC	353.9	411.6	+ 16.3

TABLE VII-17. SUMMARY OF MICHIGAN PUBLIC ASSISTANCE: JANUARY 1970 AND 1981 (cont.)

Program	1980	1981	Percentage change
	Amounts ($000) (cont.)		
Food stamps			
Purchase value	(b)	(b)	(b)
Bonus value	20,820.7	34,078.0	+ 63.7
Cuban relief	.9	59.7	+6,533.3
Medical assistance	91,366.6	85,880.6	- 5.9
Total amount of money payments	113,300.8	148,501.6	+ 31.1
	Amounts per family or recipient		
Aid to families with dependent children			
Per family			
Unemployed parent	444.88	450.34	+ 1.2
Regular segment	361.44	373.87	+ 3.4
Per recipient			
Unemployed parent	100.66	106.73	+ 6.0
Regular segment	121.97	128.46	+ 5.3
General assistance			
Per case	190.64	179.84	- 5.6
Per recipient	158.61	153.79	- 3.0
Emergency assistance			
Per case	227.58	254.27	+ 11.7
Per recipient	66.43	69.40	+ 4.4
Food stamps			
Bonus per household	69.55	90.23	+ 29.7
Bonus per recipient	27.13	36.77	+ 35.5
Total expenditures per family recipient	119.09	134.63	+ 13.0

SOURCE: Michigan Department of Social Services, Assistance Payments Statistics (Lansing: monthly), January 1981, Table 1.

a. More than 100 percent.

b. New federal regulations eliminated the purchase requirement effective 1 January 1979.

TABLE VII-18. ERROR RATES FOR AID TO FAMILIES WITH DEPENDENT CHILDREN: 1976-1980

(Percentage of total cases)

Reporting period	Source		Type			Total
	Agency	Client	Ineligible	Overpayment	Underpayment	
Jan-Jun 1976	19.8	16.9	5.4	24.6	6.7	36.7
Jul-Dec 1976	15.8	15.6	4.9	19.4	7.0	31.4
Jan-Jun 1977	16.3	12.1	4.3	16.1	8.1	28.4
Jul-Dec 1977	13.8	13.8	4.4	17.2	7.3	29.0
Jan-Jun 1978	14.4	13.3	4.5	16.5	6.7	27.6
Jul-Sep 1978	12.6	14.0	5.2	15.0	6.4	26.6
Oct 1978-Mar 1979	18.1	15.1	4.6	19.7	8.9	33.2
Apr-Sep 1979	13.6	15.1	4.7	17.1	7.0	28.8
Oct 1979-Mar 1980	16.3	12.9	4.3	16.3	8.7	29.2
Apr-Sep 1980	14.5	10.9	4.4	14.2	6.7	25.4

SOURCE: State of Michigan, Department of Social Services, Office of Standards and Investigations, Michigan AFDC Corrective Action Plan for the April-September 1980 Reporting Period (Lansing: 1981); and similar documents for previous years.

TABLE VII-19. MISPAYMENT RATES FOR AID TO FAMILIES WITH DEPENDENT CHILDREN: 1976-1980

(Percentage of total funds)

Reporting period	Ineligible cases	Overpayment cases	Underpayment cases	Total
Jan-Jun 1976	5.3	6.5	0.6	12.4
Jul-Dec 1976	4.8	5.1	0.7	10.6
Jan-Jun 1977	4.4	4.9	1.0	10.3
Jul-Dec 1977	4.0	4.7	1.2	9.9
Jan-Jun 1978	3.9	4.3	0.6	8.8
Jul-Sep 1978	5.5	4.1	1.7	11.3
Oct 1978-Mar 1979	4.3	5.5	0.8	10.7
Apr-Sep 1979	4.3	4.9	0.8	10.0
Oct 1979-Mar 1980	3.9	4.5	1.0	9.4
Apr-Sep 1980	3.8	3.6	0.7	8.1

SOURCE: State of Michigan, Department of Social Services, Office of Standards and Investigations, Michigan AFDC Corrective Action Plan for the April-September 1980 Reporting Period (Lansing: 1981); and similar documents for previous years.

TABLE VII-20. NUMBER OF MONTHLY CASH BENEFICIARIES UNDER THE FEDERAL OLD AGE, SURVIVOR, DISABILITY, AND HEALTH INSURANCE PROGRAM (SOCIAL SECURITY) BY BENEFIT CATEGORY, SEX OF ADULTS, AND COUNTY: 31 DECEMBER 1977-1979

		Benefit category					Adult beneficiaries		
County	Year	Retired worker[a]	Disabled worker	Wife or husband[b]	Children	Widow, widower, or parent	Men	Women	Total
Alcona	1977	1,551	220	375	302	306	1,169	1,283	2,754
	1978	1,629	240	378	302	320	1,234	1,333	2,869
	1979	1,698	221	372	298	330	1,271	1,350	2,919
Alger	1977	978	186	212	291	263	787	852	1,930
	1978	1,007	179	223	259	272	789	892	1,940
	1979	1,043	189	250	257	265	816	931	2,004
Allegan	1977	5,763	866	1,178	1,503	1,365	3,967	5,205	10,675
	1978	5,943	858	1,179	1,476	1,369	4,057	5,292	10,825
	1979	6,104	831	1,183	1,396	1,397	4,097	5,418	10,911
Alpena	1977	2,953	479	742	939	920	2,200	2,894	6,033
	1978	3,052	492	747	902	948	2,249	2,990	6,141
	1979	3,199	511	762	907	993	2,346	3,119	6,372
Antrim	1977	1,956	250	380	394	390	1,357	1,619	3,370
	1978	2,030	259	391	382	404	1,397	1,687	3,466
	1979	2,113	256	406	384	418	1,442	1,751	3,577
Arenac	1977	1,628	286	388	425	388	1,262	1,428	3,115
	1978	1,679	283	398	420	399	1,308	1,451	3,179
	1979	1,764	271	410	446	399	1,356	1,488	3,290
Baraga	1977	1,006	192	268	290	263	861	868	2,019
	1978	1,044	185	260	278	265	867	887	2,032
	1979	1,062	165	244	233	274	848	897	1,978
Barry	1977	3,223	458	668	777	722	2,251	2,820	5,848
	1978	3,316	480	695	765	723	2,304	2,910	5,979
	1979	3,382	494	675	750	722	2,336	2,937	6,023
Bay	1977	8,606	1,355	1,948	2,540	2,792	6,006	8,695	17,241
	1978	8,839	1,338	1,998	2,391	2,815	6,112	8,878	17,381
	1979	9,094	1,326	1,994	2,272	2,859	6,235	9,038	17,545
Benzie	1977	1,357	181	252	302	235	902	1,123	2,327
	1978	1,393	186	268	275	222	925	1,144	2,344
	1979	1,430	184	267	261	218	953	1,146	2,360
Berrien	1977	15,129	2,405	2,742	4,648	3,698	9,955	14,019	28,622
	1978	15,525	2,399	2,730	4,481	3,771	10,123	14,302	28,906
	1979	15,763	2,408	2,686	4,401	3,862	10,179	14,540	29,120

TABLE VII-20. NUMBER OF MONTHLY CASH BENEFICIARIES UNDER THE FEDERAL OLD AGE, SURVIVOR, DISABILITY, AND HEALTH INSURANCE PROGRAM (SOCIAL SECURITY) BY BENEFIT CATEGORY, SEX OF ADULTS, AND COUNTY: 31 DECEMBER 1977-1979 (cont.)

County	Year	Benefit category					Adult beneficiaries		Total
		Retired worker[a]	Disabled worker	Wife or husband[b]	Children	Widow, widower, or parent	Men	Women	
Branch	1977	3,581	497	606	1,069	784	2,260	3,208	6,537
	1978	3,698	501	619	1,059	778	2,318	3,278	6,655
	1979	3,800	518	597	1,039	777	2,391	3,301	6,731
Calhoun	1977	11,727	2,257	1,927	3,138	2,832	7,634	11,109	21,881
	1978	12,105	2,279	1,959	3,051	2,867	7,841	11,369	22,261
	1979	12,412	2,253	1,954	2,934	2,909	7,979	11,549	22,462
Cass	1977	3,633	500	635	1,043	807	2,387	3,188	6,618
	1978	3,681	502	619	965	797	2,406	3,193	6,564
	1979	3,816	485	629	936	810	2,473	3,267	6,676
Charlevoix	1977	2,171	257	427	512	464	1,446	1,873	3,831
	1978	2,262	279	426	512	472	1,510	1,929	3,951
	1979	2,381	260	422	460	482	1,553	1,992	4,005
Cheboygan	1977	2,152	317	475	520	506	1,535	1,915	3,970
	1978	2,246	311	492	467	523	1,586	1,986	4,039
	1979	2,329	295	479	438	532	1,625	2,010	4,073
Chippewa	1977	2,939	420	632	788	762	2,114	2,639	5,541
	1978	3,044	432	625	756	785	2,153	2,733	5,642
	1979	3,106	434	627	726	804	2,170	2,801	5,697
Clare	1977	3,041	508	645	762	576	2,259	2,511	5,532
	1978	3,108	517	642	754	613	2,302	2,578	5,634
	1979	3,217	563	641	782	641	2,377	2,685	5,844
Clinton	1977	2,693	346	647	792	727	1,845	2,568	5,205
	1978	2,747	343	641	762	754	1,861	2,624	5,247
	1979	2,776	327	639	729	772	1,884	2,630	5,243
Crawford	1977	951	163	199	253	176	708	781	1,742
	1978	965	173	202	229	179	721	798	1,748
	1979	996	179	206	246	182	738	825	1,809
Delta	1977	3,658	602	849	1,099	1,023	2,655	3,477	7,231
	1978	3,710	612	847	1,083	1,031	2,685	3,515	7,283
	1979	3,841	613	873	1,016	1,083	2,773	3,637	7,426
Dickinson	1977	3,328	423	689	580	906	2,328	3,018	5,926
	1978	3,422	409	686	570	920	2,358	3,079	6,007
	1979	3,471	424	691	555	932	2,368	3,150	6,073

TABLE VII-20. NUMBER OF MONTHLY CASH BENEFICIARIES UNDER THE FEDERAL OLD AGE, SURVIVOR, DISABILITY, AND HEALTH INSURANCE PROGRAM (SOCIAL SECURITY) BY BENEFIT CATEGORY, SEX OF ADULTS, AND COUNTY: 31 DECEMBER 1977-1979 (cont.)

County	Year	Benefit category					Adult beneficiaries		Total
		Retired worker[a]	Disabled worker	Wife or husband[b]	Children	Widow, widower, or parent	Men	Women	
Eaton	1977	4,364	529	930	1,232	1,146	2,911	4,058	8,201
	1978	4,455	545	907	1,148	1,147	2,941	4,113	8,202
	1979	4,588	559	898	1,142	1,186	3,023	4,208	8,373
Emmet	1977	2,432	290	472	588	577	1,600	2,171	4,359
	1978	2,470	285	463	577	617	1,596	2,239	4,412
	1979	2,566	253	451	536	622	1,604	2,288	4,428
Genesee	1977	26,639	6,740	6,174	11,334	8,746	19,997	28,302	59,633
	1978	27,043	6,782	6,069	10,879	8,915	20,039	28,770	59,688
	1979	27,551	6,753	6,015	10,675	9,078	20,195	29,202	60,072
Gladwin	1977	2,169	402	509	548	458	1,706	1,832	4,086
	1978	2,242	415	508	537	480	1,760	1,885	4,182
	1979	2,730	419	507	521	490	1,833	1,953	4,307
Gogebic	1977	2,930	469	678	738	953	2,203	2,827	5,768
	1978	2,991	472	692	699	930	2,244	2,841	5,784
	1979	3,070	464	699	642	933	2,262	2,904	5,808
Grand Traverse	1977	4,964	681	830	1,052	1,051	3,140	4,386	8,578
	1978	5,106	701	829	1,032	1,069	3,219	4,486	8,737
	1979	5,287	712	842	1,067	1,112	3,300	4,653	9,020
Gratiot	1977	3,372	465	733	860	979	2,306	3,243	6,409
	1978	3,431	454	728	810	1,005	2,304	3,314	6,428
	1979	3,519	442	728	772	1,028	2,344	3,373	6,489
Hillsdale	1977	3,681	540	789	915	857	2,548	3,319	6,782
	1978	3,765	531	768	900	855	2,548	3,371	6,819
	1979	3,862	542	742	837	889	2,596	3,439	6,872
Houghton	1977	4,450	607	1,082	898	1,270	3,386	4,023	8,307
	1978	4,540	585	1,095	867	1,271	3,424	4,067	8,358
	1979	4,627	543	1,066	830	1,310	3,424	4,122	8,376
Huron	1977	4,043	439	1,029	950	1,135	2,909	3,737	7,596
	1978	4,169	460	1,033	868	1,154	2,994	3,822	7,684
	1979	4,263	456	1,021	834	1,162	3,038	3,864	7,736
Ingham	1977	16,556	2,553	3,059	5,277	4,496	10,349	16,315	31,941
	1978	16,944	2,523	3,066	5,137	4,513	10,470	16,576	32,183
	1979	17,385	2,481	3,044	5,161	4,577	10,593	16,894	32,648

TABLE VII-20. NUMBER OF MONTHLY CASH BENEFICIARIES UNDER THE FEDERAL OLD AGE, SURVIVOR, DISABILITY, AND HEALTH INSURANCE PROGRAM (SOCIAL SECURITY) BY BENEFIT CATEGORY, SEX OF ADULTS, AND COUNTY: 31 DECEMBER 1977-1979 (cont.)

County	Year	Benefit category					Adult beneficiaries		Total
		Retired worker[a]	Disabled worker	Wife or husband[b]	Children	Widow, widower, or parent	Men	Women	
Ionia	1977	3,908	604	761	1,182	973	2,609	3,637	7,428
	1978	3,954	605	753	1,091	976	2,612	3,676	7,379
	1979	4,068	604	738	1,092	1,010	2,635	3,785	7,512
Iosco	1977	3,132	433	687	672	618	2,324	2,546	5,542
	1978	3,232	462	693	622	663	2,371	2,679	5,672
	1979	3,406	463	715	609	685	2,447	2,822	5,878
Iron	1977	2,194	362	542	419	671	1,756	2,013	4,188
	1978	2,268	361	537	379	690	1,789	2,067	4,235
	1979	3,277	352	551	380	667	1,836	2,111	4,327
Isabella	1977	2,510	404	543	1,065	691	1,756	2,392	5,213
	1978	2,603	385	531	1,020	681	1,808	2,392	5,220
	1979	2,669	381	525	1,018	690	1,828	2,437	5,283
Jackson	1977	11,507	1,832	2,038	3,231	2,948	7,331	10,994	21,556
	1978	11,841	1,862	2,049	3,052	2,956	7,489	11,219	21,760
	1979	12,132	1,842	2,046	2,856	2,966	7,619	11,367	21,842
Kalamazoo	1977	14,167	2,187	2,352	3,568	3,456	8,505	13,657	25,730
	1978	14,581	2,189	2,361	3,439	3,485	8,686	13,930	26,055
	1979	14,981	2,146	2,329	3,318	3,560	8,821	14,195	26,334
Kalkaska	1977	988	171	217	247	182	753	805	1,805
	1978	1,003	174	205	229	191	752	821	1,802
	1979	1,046	174	203	235	209	765	867	1,867
Kent	1977	34,504	4,589	6,078	8,647	8,522	21,021	32,672	62,340
	1978	35,410	4,664	6,073	8,305	8,559	21,400	33,306	63,011
	1979	36,427	4,618	5,956	8,004	8,663	21,700	33,964	63,668
Keweenaw	1977	419	71	121	67	99	352	358	777
	1978	447	63	129	63	108	365	382	810
	1979	454	57	128	54	104	363	380	797
Lake	1977	1,370	212	262	298	224	1,004	1,064	2,366
	1978	1,385	211	259	301	210	1,014	1,051	2,366
	1979	1,449	228	262	286	225	1,062	1,102	2,450
Lapeer	1977	3,489	647	746	1,539	917	2,525	3,274	7,338
	1978	3,516	643	737	1,502	968	2,517	3,347	7,366
	1979	3,628	661	744	1,536	995	2,579	3,449	7,564

TABLE VII-20. NUMBER OF MONTHLY CASH BENEFICIARIES UNDER THE FEDERAL OLD AGE, SURVIVOR, DISABILITY, AND HEALTH INSURANCE PROGRAM (SOCIAL SECURITY) BY BENEFIT CATEGORY, SEX OF ADULTS, AND COUNTY: 31 DECEMBER 1977-1979 (cont.)

County	Year	Benefit category					Adult beneficiaries		Total
		Retired worker[a]	Disabled worker	Wife or husband[b]	Children	Widow, widower, or parent	Men	Women	
Leelanau	1977	1,363	134	282	234	231	923	1,087	2,244
	1978	1,406	131	284	228	232	939	1,114	2,281
	1979	1,493	129	284	206	243	993	1,156	2,355
Lenawee	1977	7,210	1,121	1,329	1,831	1,873	4,545	6,988	13,364
	1978	7,361	1,124	1,329	1,715	1,892	4,617	7,089	13,421
	1979	7,510	1,116	1,322	1,705	1,944	4,668	7,224	13,597
Livingston	1977	4,376	688	899	1,412	1,105	3,018	4,050	8,480
	1978	4,554	689	913	1,392	1,162	3,101	4,217	8,710
	1979	4,802	670	923	1,404	1,213	3,184	4,424	9,012
Luce	1977	758	177	124	337	155	563	651	1,551
	1978	782	175	133	326	160	583	667	1,576
	1979	793	184	124	324	158	595	664	1,583
Mackinac	1977	1,291	191	258	326	266	922	1,084	2,332
	1978	1,346	171	271	323	275	940	1,123	2,386
	1979	1,375	169	283	299	291	957	1,161	2,417
Macomb	1977	35,432	6,823	7,501	12,477	12,836	24,994	37,598	75,069
	1978	37,536	6,946	7,705	12,061	13,350	25,961	39,576	77,598
	1979	39,967	6,858	7,856	11,742	13,913	26,995	41,599	80,336
Manistee	1977	2,924	361	474	511	620	1,899	2,480	4,890
	1978	2,984	371	483	506	612	1,924	2,526	4,956
	1979	3,041	362	473	489	625	1,932	2,569	4,990
Marquette	1977	5,012	877	1,094	1,443	1,391	3,678	4,696	9,817
	1978	5,056	853	1,083	1,347	1,413	3,657	4,748	9,752
	1979	5,201	831	1,096	1,342	1,456	3,706	4,878	9,926
Mason	1977	2,768	305	512	484	554	1,771	2,368	4,623
	1978	2,940	316	524	493	593	1,883	2,490	4,866
	1979	3,029	315	499	467	629	1,918	2,554	4,939
Mecosta	1977	2,590	413	511	738	543	1,828	2,229	4,795
	1978	2,698	410	530	686	568	1,870	2,336	4,892
	1979	2,780	402	521	699	573	1,903	2,373	4,975
Menominee	1977	2,805	416	629	644	737	2,047	2,540	5,231
	1978	2,850	399	619	627	758	2,043	2,583	5,253
	1979	2,903	389	624	600	748	2,063	2,601	6,264

TABLE VII-20. NUMBER OF MONTHLY CASH BENEFICIARIES UNDER THE FEDERAL OLD AGE, SURVIVOR, DISABILITY, AND HEALTH INSURANCE PROGRAM (SOCIAL SECURITY) BY BENEFIT CATEGORY, SEX OF ADULTS, AND COUNTY: 31 DECEMBER 1977-1979 (cont.)

		Benefit category					Adult beneficiaries		
County	Year	Retired worker[a]	Disabled worker	Wife or husband[b]	Children	Widow, widower, or parent	Men	Women	Total
Midland	1977	3,528	494	959	1,174	1,152	2,578	3,555	7,307
	1978	3,694	496	965	1,141	1,169	2,671	3,653	7,465
	1979	3,852	506	980	1,082	1,196	2,751	3,783	7,616
Missaukee	1977	980	156	255	228	230	748	873	1,849
	1978	1,019	161	251	203	226	788	869	1,860
	1979	1,046	155	244	196	230	798	877	1,87
Monroe	1977	7,438	1,369	1,787	2,572	2,236	5,209	7,621	15,402
	1978	7,601	1,402	1,803	2,502	2,321	5,257	7,870	15,629
	1979	7,851	1,415	1,833	2,458	2,343	5,335	8,107	15,900
Montcalm	1977	4,724	754	995	1,112	1,039	3,336	4,176	8,624
	1978	4,878	738	997	1,092	1,065	3,388	4,290	8,770
	1979	5,003	709	967	1,088	1,092	3,418	4,353	8,859
Montmorency	1977	1,317	213	298	244	268	1,009	1,087	2,340
	1978	1,428	225	319	255	283	1,089	1,166	2,510
	1979	1,514	221	324	233	287	1,145	1,201	2,579
Muskegon	1977	12,451	2,669	2,733	4,619	3,693	9,156	12,390	26,165
	1978	12,820	2,712	2,750	4,450	3,763	9,302	12,743	26,495
	1979	13,252	2,726	2,727	4,345	3,803	9,488	13,020	26,853
Newaygo	1977	3,210	483	658	783	704	2,280	2,775	5,838
	1978	3,234	474	656	747	715	2,273	2,806	5,826
	1979	3,361	467	676	719	745	2,325	2,924	5,968
Oakland	1977	60,366	8,849	12,728	17,393	19,514	39,333	62,124	118,850
	1978	62,477	8,859	12,787	16,489	19,993	40,087	64,029	120,605
	1979	64,552	8,741	12,684	15,916	20,432	40,723	65,686	122,325
Oceana	1977	2,289	360	473	638	486	1,660	1,948	4,246
	1978	2,319	384	471	651	521	1,671	2,024	4,346
	1979	2,335	376	462	580	531	1,667	2,037	4,284
Ogemaw	1977	2,025	397	479	520	417	1,639	1,679	3,838
	1978	2,069	417	478	540	441	1,649	1,756	3,945
	1979	2,142	430	481	521	454	1,697	1,810	4,028
Ontonagon	1977	1,159	215	286	325	332	942	1,050	2,317
	1978	1,225	198	293	315	333	974	1,075	2,364
	1979	1,277	176	295	282	338	797	1,107	2,368

TABLE VII-20. NUMBER OF MONTHLY CASH BENEFICIARIES UNDER THE FEDERAL OLD AGE, SURVIVOR, DISABILITY, AND HEALTH INSURANCE PROGRAM (SOCIAL SECURITY) BY BENEFIT CATEGORY, SEX OF ADULTS, AND COUNTY: 31 DECEMBER 1977-1979 (cont.)

		Benefit category					Adult beneficiaries		
County	Year	Retired worker[a]	Disabled worker	Wife or husband[b]	Children	Widow, widower, or parent	Men	Women	Total
Osceola	1977	2,088	363	490	548	482	1,570	1,853	3,971
	1978	2,156	359	481	547	499	1,607	1,888	4,042
	1979	2,183	370	483	497	511	1,610	1,937	4,044
Oscoda	1977	894	155	217	228	181	711	736	1,675
	1978	900	152	210	197	188	708	742	1,647
	1979	885	145	199	195	198	673	754	1,622
Otsego	1977	1,387	192	300	474	297	985	1,191	2,650
	1978	1,439	199	302	448	315	1,013	1,242	2,703
	1979	1,514	200	311	470	328	1,065	1,288	2,823
Ottawa	1977	9,649	1,072	2,276	2,268	2,574	6,407	9,164	17,839
	1978	10,029	1,120	2,319	2,167	2,606	6,589	9,485	18,241
	1979	10,513	1,094	2,363	2,068	2,638	6,796	9,812	18,676
Presque Isle	1977	1,604	269	447	416	440	1,288	1,472	3,176
	1978	1,665	275	454	397	438	1,334	1,498	3,229
	1979	1,746	254	456	387	452	1,351	1,557	3,295
Roscommon	1977	2,998	459	617	459	507	2,247	2,334	5,040
	1978	3,198	508	646	478	519	2,377	2,494	5,349
	1979	3,384	523	677	477	541	2,483	2,642	5,602
Saginaw	1977	14,474	2,914	3,475	5,829	4,839	10,609	15,093	31,531
	1978	14,906	2,950	3,505	5,532	4,915	10,772	15,504	31,808
	1979	15,502	2,902	3,568	5,411	4,997	11,047	15,922	32,380
St. Clair	1977	10,829	1,435	2,201	2,828	2,985	7,203	10,247	20,278
	1978	10,997	1,431	2,177	2,767	3,040	7,212	10,433	20,412
	1979	11,267	1,398	2,194	2,741	3,125	7,308	10,676	20,725
St. Joseph	1977	5,245	629	867	1,034	1,081	3,220	4,602	8,856
	1978	5,325	627	864	1,004	1,122	3,233	4,705	8,942
	1979	5,465	630	853	1,004	1,146	3,296	4,798	9,098
Sanilac	1977	4,018	496	966	949	1,057	2,921	3,616	7,486
	1978	4,180	488	979	905	1,077	3,018	3,706	7,629
	1979	4,330	489	988	901	1,087	3,102	3,792	7,795
Schoolcraft	1977	1,031	170	280	285	268	796	953	2,034
	1978	1,062	185	288	314	285	828	992	2,134
	1979	1,093	175	276	284	299	837	1,006	2,127

TABLE VII-20. NUMBER OF MONTHLY CASH BENEFICIARIES UNDER THE FEDERAL OLD AGE, SURVIVOR, DISABILITY, AND HEALTH INSURANCE PROGRAM (SOCIAL SECURITY) BY BENEFIT CATEGORY, SEX OF ADULTS, AND COUNTY: 31 DECEMBER 1977-1979 (cont.)

		Benefit category					Adult beneficiaries		
County	Year	Retired worker[a]	Disabled worker	Wife or husband[b]	Children	Widow, widower, or parent	Men	Women	Total
Shiawassee	1977	4,559	768	964	1,577	1,255	3,039	4,507	9,123
	1978	4,724	766	960	1,474	1,291	3,138	4,603	9,215
	1979	4,907	738	950	1,403	1,324	3,203	4,716	9,322
Tuscola	1977	3,979	648	1,023	1,476	1,210	2,983	3,877	8,336
	1978	4,104	673	1,040	1,427	1,227	3,065	3,979	8,471
	1979	4,269	655	1,056	1,392	1,239	3,144	4,075	8,611
Van Buren	1977	6,491	1,003	1,140	1,897	1,410	4,298	5,746	11,941
	1978	6,605	1,023	1,138	1,832	1,424	4,354	5,836	12,022
	1979	6,794	998	1,113	1,758	1,431	4,421	5,915	12,094
Washtenaw	1977	11,868	2,345	1,965	4,034	2,880	7,348	11,710	23,092
	1978	12,084	2,365	1,950	3,861	2,944	7,437	11,906	23,204
	1979	12,484	2,391	2,000	3,741	3,001	7,648	12,228	23,617
Wayne	1977	179,628	36,642	34,018	63,259	58,292	126,719	181,861	371,839
	1978	179,855	36,035	33,231	60,406	57,764	125,256	181,629	367,291
	1979	182,150	34,842	32,464	58,232	58,126	124,380	183,202	365,814
Wexford	1977	2,483	414	519	652	598	1,758	2,256	4,666
	1978	2,585	434	526	623	607	1,833	2,319	4,775
	1979	2,611	410	507	585	625	1,812	2,341	4,738
MICHIGAN	1977	667,053	115,834	134,545	206,552	192,612	459,059	650,985	1,316,596
	1978	681,932	115,870	134,224	198,064	194,776	463,889	662,913	1,324,866
	1979	700,698	113,918	133,353	192,114	198,134	469,493	676,610	1,338,217

SOURCE: Social Security Administration, special release.

a. Includes "special" primary beneficiaries.

b. Includes "special" wife beneficiaries.

TABLE VII-21. SOCIAL SECURITY INSURANCE TRUST FUND DISBURSEMENTS TO MICHIGAN RESIDENTS, BY FUND AND COUNTY, FISCAL YEARS: 1978, 1979, AND 1980

(Thousands of dollars)

County	Year	Medicare: hospital	Medicare: supplemental	Disability	Retirement	Survivors	Supplemental income
Alcona	1978	1,313	466	1,097	5,154	1,279	189
	1979	1,601	557	1,197	6,013	1,347	212
	1980	1,921	713	1,338	6,779	1,726	181
Alger	1978	1,027	366	777	3,129	1,215	233
	1979	1,252	438	852	3,673	1,202	213
	1980	1,503	560	1,045	4,065	1,437	253
Allegan	1978	5,962	2,141	3,803	19,384	6,278	1,009
	1979	7,270	2,561	4,291	22,231	6,641	797
	1980	8,724	3,278	4,604	25,206	8,414	1,114
Alpena	1978	2,811	995	2,459	10,157	4,232	467
	1979	3,428	1,191	2,705	11,732	4,572	480
	1980	4,113	1,524	2,995	13,462	5,787	663
Antrim	1978	1,768	629	1,214	6,584	1,645	288
	1979	2,156	753	1,385	7,572	1,844	276
	1980	2,588	964	1,484	8,369	2,338	322
Arenac	1978	1,490	538	1,342	5,375	1,719	319
	1979	1,817	644	1,390	6,288	1,791	272
	1980	2,181	824	1,594	7,224	2,248	336
Baraga	1978	1,058	377	766	3,318	1,100	215
	1979	1,290	451	795	3,774	1,166	139
	1980	1,548	577	911	4,154	1,410	221
Barry	1978	3,568	1,278	2,155	10,701	3,406	417
	1979	4,350	1,529	2,488	12,289	3,487	535
	1980	5,221	1,957	2,851	13,574	4,132	468
Bay	1978	9,645	3,449	6,342	30,400	12,950	1,464
	1979	11,761	4,127	6,813	34,560	13,685	1,475
	1980	14,114	5,282	7,596	38,877	17,031	1,740
Benzie	1978	1,313	471	817	4,353	1,035	213
	1979	1,601	564	932	4,974	1,038	196
	1980	1,921	722	1,029	5,474	1,288	466
Berrien	1978	16,487	5,942	10,689	51,028	18,151	3,352
	1979	20,104	7,109	11,967	57,725	19,055	3,281
	1980	24,127	9,099	13,384	64,422	23,210	3,996

TABLE VII-21. SOCIAL SECURITY INSURANCE TRUST FUND DISBURSEMENTS TO MICHIGAN RESIDENTS, BY FUND AND COUNTY, FISCAL YEARS: 1978, 1979, AND 1980 (cont.)

(Thousands of dollars)

County	Year	Medicare: hospital	Medicare: supplemental	Disability	Retirement	Survivors	Supplemental income
Branch	1978	3,784	1,373	2,255	11,995	4,040	682
	1979	4,614	1,642	2,498	13,798	4,186	560
	1980	5,537	2,102	2,830	15,329	4,996	606
Calhoun	1978	13,429	4,836	9,809	40,653	13,610	2,649
	1979	16,375	5,786	10,811	46,149	14,440	2,613
	1980	19,652	7,405	12,126	51,603	17,655	3,180
Cass	1978	3,900	1,406	2,316	11,796	3,960	631
	1979	4,755	1,682	2,505	13,557	4,060	605
	1980	5,707	2,153	2,844	15,340	5,010	725
Charlevoix	1978	2,247	804	1,199	7,201	2,136	270
	1979	2,740	962	1,350	8,278	2,175	183
	1980	3,288	1,231	1,479	9,399	2,798	349
Cheboygan	1978	2,077	743	1,434	7,077	2,215	327
	1979	2,533	889	1,502	8,186	2,385	395
	1980	3,040	1,138	1,633	9,200	2,898	908
Chippewa	1978	3,081	1,101	1,878	9,394	3,457	592
	1979	3,757	1,317	1,968	10,683	3,637	619
	1980	4,509	1,686	2,284	11,677	4,470	766
Clare	1978	2,317	835	2,454	10,056	2,907	380
	1979	2,825	999	2,869	11,536	3,175	394
	1980	3,390	1,278	3,432	12,955	3,978	411
Clinton	1978	3,035	1,079	1,621	8,635	3,342	315
	1979	3,701	1,291	1,653	9,682	3,675	252
	1980	4,441	1,652	1,847	10,909	4,561	300
Crawford	1978	687	244	759	3,171	899	87
	1979	838	292	899	3,626	975	27
	1980	1,006	374	1,016	4,147	1,250	32
Delta	1978	4,564	1,628	2,671	11,370	4,777	736
	1979	5,565	1,947	2,983	13,149	4,983	700
	1980	6,679	2,492	3,436	14,741	6,079	840
Dickinson	1978	4,101	1,470	1,764	10,582	3,745	315
	1979	5,000	1,758	1,994	12,008	3,962	303
	1980	6,001	2,250	2,305	13,037	4,846	375

TABLE VII-21. SOCIAL SECURITY INSURANCE TRUST FUND DISBURSEMENTS TO MICHIGAN RESIDENTS, BY FUND AND COUNTY, FISCAL YEARS: 1978, 1979, AND 1980 (cont.)

(Thousands of dollars)

County	Year	Medicare: hospital	Medicare: supplemental	Disability	Retirement	Survivors	Supplemental income
Eaton	1978	4,927	1,769	2,452	13,940	5,298	577
	1979	6,008	2,117	2,705	15,752	5,679	514
	1980	7,210	2,709	3,143	17,992	7,042	362
Emmet	1978	2,402	854	1,238	7,902	2,759	304
	1979	2,929	1,022	1,323	9,042	2,926	283
	1980	3,514	1,308	1,461	10,257	3,738	362
Genesee	1978	30,233	10,789	34,575	94,788	45,492	6,606
	1979	36,865	12,908	37,993	106,632	48,199	6,473
	1980	44,242	16,520	42,074	119,879	59,977	8,250
Gladwin	1978	1,738	624	2,028	7,271	2,064	320
	1979	2,119	746	2,172	8,472	2,259	366
	1980	2,543	955	2,523	9,844	2,845	419
Gogebic	1978	3,660	1,303	2,087	9,487	3,787	420
	1979	4,463	1,559	2,269	10,804	3,765	397
	1980	5,356	1,995	2,530	11,907	4,538	480
Grand Traverse	1978	4,842	1,730	2,870	16,568	5,039	911
	1979	5,904	2,070	3,274	18,946	5,368	903
	1980	7,085	2,649	3,755	21,313	6,949	1,143
Gratiot	1978	4,487	1,619	2,045	10,953	4,192	598
	1979	5,471	1,937	2,164	12,460	4,394	612
	1980	6,566	2,479	2,320	14,027	5,480	797
Hillsdale	1978	4,286	1,553	2,367	12,101	3,816	711
	1979	5,226	1,858	2,641	13,703	4,041	618
	1980	6,272	2,378	2,939	15,354	5,007	741
Houghton	1978	5,128	1,833	2,520	14,402	4,946	907
	1979	6,253	2,193	2,640	16,246	5,305	921
	1980	7,504	2,806	2,989	17,686	6,711	1,002
Huron	1978	4,579	1,633	1,921	13,262	4,630	713
	1979	5,584	1,954	2,111	15,080	4,816	692
	1980	6,701	2,501	2,420	16,999	5,875	789
Ingham	1978	19,175	6,843	11,955	60,901	23,121	6,961
	1979	23,381	8,188	12,906	69,603	24,164	5,139
	1980	28,059	10,478	14,256	78,262	30,528	4,210

TABLE VII-21. SOCIAL SECURITY INSURANCE TRUST FUND DISBURSEMENTS TO MICHIGAN RESIDENTS, BY FUND AND COUNTY, FISCAL YEARS: 1978, 1979, AND 1980 (cont.)

(Thousands of dollars)

County	Year	Medicare: hospital	Medicare: supplemental	Disability	Retirement	Survivors	Supplemental income
Ionia	1978	4,927	1,764	2,833	12,837	4,698	708
	1979	6,008	2,110	3,055	14,615	4,884	430
	1980	7,210	2,700	3,496	16,287	5,974	833
Iosco	1978	2,610	937	2,225	10,471	2,835	261
	1979	3,183	1,121	2,495	12,150	2,966	268
	1980	3,820	1,435	2,871	13,895	3,817	346
Iron	1978	2,502	896	1,573	7,294	2,565	350
	1979	3,051	1,072	1,708	8,326	2,654	348
	1960	3,661	1,371	1,851	9,432	3,171	378
Isabella	1978	2,711	970	1,873	8,673	3,493	740
	1979	3,305	1,161	2,003	9,886	3,666	659
	1980	3,967	1,486	2,235	11,179	4,593	793
Jackson	1978	13,336	4,780	8,611	40,513	14,549	1,746
	1979	16,262	5,719	9,462	46,206	15,056	1,665
	1980	19,516	7,320	10,658	51,558	18,355	1,947
Kalamazoo	1978	15,939	5,684	9,413	50,436	17,085	2,711
	1979	19,436	6,801	10,229	57,507	18,066	2,454
	1980	23,325	8,704	11,225	64,548	22,184	3,233
Kalkaska	1978	826	297	763	3,213	833	168
	1979	1,008	355	884	3,715	938	140
	1980	1,209	454	1,047	4,196	1,177	191
Kent	1978	39,129	14,000	20,334	120,363	41,778	5,519
	1979	47,713	16,750	22,262	136,703	44,032	5,350
	1980	57,260	21,437	24,892	151,850	54,447	6,356
Keweenaw	1978	378	136	277	1,420	374	66
	1979	461	163	278	1,648	389	32
	1980	554	208	284	1,783	445	65
Lake	1978	1,220	446	883	4,135	899	332
	1979	1,488	534	1,052	4,789	927	371
	1980	1,786	684	1,266	5,308	1,180	361
Lapeer	1978	3,954	1,425	3,203	12,030	5,611	828
	1979	4,821	1,705	3,634	13,673	5,958	826
	1980	5,786	2,182	4,122	15,435	7,368	961

TABLE VII-21. SOCIAL SECURITY INSURANCE TRUST FUND DISBURSEMENTS TO MICHIGAN RESIDENTS, BY FUND AND COUNTY, FISCAL YEARS: 1978, 1979, AND 1980 (cont.)

(Thousands of dollars)

County	Year	Medicare: hospital	Medicare: supplemental	Disability	Retirement	Survivors	Supplemental income
Leelanau	1978	1,328	474	582	4,477	1,076	99
	1979	1,620	567	619	5,176	1,132	90
	1980	1,944	726	644	5,958	1,420	93
Lenawee	1978	7,892	2,842	5,095	24,055	8,773	1,051
	1979	9,624	3,400	5,613	27,252	9,290	1,077
	1980	11,549	4,352	6,280	30,499	11,471	1,262
Livingston	1978	3,846	1,378	3,445	15,731	6,369	547
	1979	4,689	1,649	3,681	18,300	6,788	525
	1980	5,628	2,110	4,196	20,746	8,559	630
Luce	1978	911	324	730	2,491	836	287
	1979	1,111	388	911	2,801	886	299
	1980	1,333	497	1,055	3,122	1,159	341
Mackinac	1978	1,220	441	772	4,134	1,229	226
	1979	1,488	527	869	4,768	1,304	245
	1980	1,786	675	948	5,205	1,650	246
Macomb	1978	28,804	10,262	33,316	129,173	64,563	4,208
	1979	35,123	12,278	36,751	152,178	69,369	4,044
	1980	42,151	15,713	41,891	179,303	86,469	5,078
Manistee	1978	3,058	1,093	1,651	9,379	2,556	305
	1979	3,729	1,307	1,810	10,670	2,692	286
	1980	4,475	1,673	1,953	11,589	3,284	319
Marquette	1978	6,070	2,154	4,021	16,629	6,600	705
	1979	7,401	2,578	4,308	18,827	7,022	757
	1980	8,882	3,299	4,594	20,943	8,654	875
Mason	1978	3,097	1,112	1,341	9,054	2,501	37
	1979	3,776	1,330	1,494	10,333	2,694	379
	1980	4,532	1,703	1,732	11,320	3,309	444
Mecosta	1978	2,541	918	1,903	8,593	2,536	432
	1979	3,098	1,098	2,110	9,798	2,763	442
	1980	3,718	1,405	2,230	11,023	3,392	530
Menominee	1978	3,236	1,162	1,702	8,882	3,043	388
	1979	3,945	1,390	1,831	9,945	3,193	376
	1980	4,735	1,779	1,949	11,075	3,947	439

TABLE VII-21. SOCIAL SECURITY INSURANCE TRUST FUND DISBURSEMENTS TO MICHIGAN RESIDENTS, BY FUND AND COUNTY, FISCAL YEARS: 1978, 1979, AND 1980 (cont.)

(Thousands of dollars)

County	Year	Medicare: hospital	Medicare: supplemental	Disability	Retirement	Survivors	Supplemental income
Midland	1978	3,282	1,178	2,430	13,403	5,901	587
	1979	4,002	1,410	2,612	15,594	6,285	618
	1980	4,803	1,804	3,162	17,937	7,860	998
Missaukee	1978	934	338	714	3,177	906	197
	1979	1,139	405	801	3,657	908	179
	1980	1,367	518	887	4,047	1,204	201
Monroe	1978	7,969	2,853	7,057	25,840	11,531	1,136
	1979	9,718	3,414	7,869	29,427	12,249	1,220
	1980	11,662	4,369	8,816	33,638	15,131	1,458
Montcalm	1978	5,020	1,813	3,232	15,460	4,775	915
	1979	6,121	2,170	3,428	17,535	5,160	1,087
	1980	7,345	2,777	3,709	19,631	6,548	1,058
Montmorency	1978	965	344	1,020	4,658	1,173	117
	1979	1,177	411	1,179	5,463	1,216	122
	1980	1,413	526	1,366	6,295	1,585	102
Muskegon	1978	13,831	4,908	12,340	44,617	18,138	2,778
	1979	16,865	5,872	13,865	51,227	19,081	2,714
	1980	20,239	7,515	15,523	57,253	23,299	3,326
Newaygo	1978	3,112	1,129	2,055	10,339	3,087	604
	1979	3,795	1,350	2,312	11,774	3,370	571
	1980	4,554	1,728	2,619	13,336	4,017	668
Oakland	1978	58,080	20,785	44,955	237,080	102,163	6,465
	1979	70,821	24,868	48,962	271,000	107,924	6,771
	1980	84,992	31,826	53,833	309,269	134,892	8,403
Oceana	1978	2,463	885	1,818	7,155	2,236	383
	1979	3,004	1,058	1,916	8,088	2,386	369
	1980	3,605	1,354	2,077	8,939	2,903	434
Ogemaw	1978	1,730	621	1,997	6,494	1,940	389
	1979	2,109	743	2,244	7,439	2,140	343
	1980	2,531	951	2,502	8,420	2,431	441
Ontonagon	1978	1,112	397	905	3,894	1,345	249
	1979	1,356	474	921	4,475	1,450	221
	1980	1,627	607	928	4,904	1,785	258

TABLE VII-21. SOCIAL SECURITY INSURANCE TRUST FUND DISBURSEMENTS TO MICHIGAN RESIDENTS, BY FUND AND COUNTY, FISCAL YEARS: 1978, 1979, AND 1980 (cont.)

(Thousands of dollars)

County	Year	Medicare: hospital	Medicare: supplemental	Disability	Retirement	Survivors	Supplemental income
Osceola	1978	2,201	790	1,700	6,733	1,977	378
	1979	2,684	945	1,873	7,582	2,205	344
	1980	3,221	1,210	2,047	8,506	2,759	574
Oscoda	1978	741	272	716	2,872	835	128
	1979	904	325	793	3,171	903	110
	1980	1,085	416	906	3,470	1,094	121
Otsego	1978	1,112	399	988	4,799	1,614	265
	1979	1,356	478	1,019	5,596	1,754	358
	1980	1,627	611	1,198	6,264	2,208	134
Ottawa	1978	[illegible]093	3,599	5,153	34,940	12,120	858
	1979	12,[illegible]7	4,306	5,688	40,524	12,586	854
	1980	14,770	5,511	6,113	46,190	15,732	1.135
Presque Isle	1978	1,637	582	1,212	5,466	1,877	306
	1979	1,996	697	1,325	6,266	1,994	305
	1980	2,396	892	1,474	7,115	2,491	333
Roscommon	1978	1,907	685	2,340	10,516	2,132	257
	1979	2,326	819	2,683	12,152	n.a.	n.a.
	1980	2,791	1,049	3,102	14,043	3,072	309
Saginaw	1978	17,105	6,106	14,378	51,474	24,187	3,624
	1979	20,857	7,305	15,663	59,389	25,482	3,592
	1980	25,031	9,349	17,833	66,837	31,744	4,378
St. Clair	1978	12,217	4,387	6,061	34,836	13,432	1,588
	1979	14,897	5,248	6,825	39,518	14,154	1,816
	1980	17,878	6,717	7,582	44,451	17,875	1,862
St. Joseph	1978	5,406	1,960	2,736	17,855	5,160	667
	1979	6,592	2,345	3,048	20,186	5,594	653
	1980	7,910	3,002	3,475	22,535	6,930	797
Sanilac	1978	4,595	1,661	2,276	13,475	4,501	647
	1979	5,603	1,987	2,501	15,586	4,838	589
	1980	6,724	2,543	2,845	17,389	5,886	695
Schoolcraft	1978	1,220	438	800	3,479	1,246	324
	1979	1,488	524	878	3,910	1,314	304
	1980	1,786	671	963	4,388	1,608	346

TABLE VII-21. SOCIAL SECURITY INSURANCE TRUST FUND DISBURSEMENTS TO MICHIGAN RESIDENTS, BY FUND AND COUNTY, FISCAL YEARS: 1978, 1979, AND 1980 (cont.)

(Thousands of dollars)

County	Year	Medicare: hospital	Medicare: supplemental	Disability	Retirement	Survivors	Supplemental income
Shiawassee	1978	5,568	1,994	3,651	15,347	6,343	796
	1979	6,789	2,385	4,086	17,700	6,755	829
	1980	8,148	3,053	4,415	20,096	8,347	826
Tuscola	1978	4,919	1,780	3,168	13,674	5,867	898
	1979	5,998	2,130	3,522	15,721	6,096	895
	1980	7,199	2,726	3,870	17,743	7,662	1,030
Van Buren	1978	7,081	2,540	4,696	20,736	5,556	1,390
	1979	8,635	3,039	5,007	23,608	6,796	1,433
	1980	10,363	3,889	5,621	26,059	8,099	1,725
Washtenaw	1978	13,692	4,908	10,813	42,749	16,124	2,325
	1979	16,695	5,872	11,950	48,762	17,082	2,201
	1980	20,036	7,515	13,357	55,861	21,570	2,672
Wayne	1978	257,060	92,813	167,324	624,400	282,997	53,993
	1979	313,455	111,043	179,736	696,966	292,418	53,404
	1980	376,175	142,112	196,522	777,360	357,404	63,127
Wexford	1978	2,525	901	1,993	8,374	2,695	480
	1979	3,079	1,078	2,027	9,432	2,840	507
	1980	3,695	1,380	2,235	10,469	3,597	576
TOTAL	1978	772,231	277,284	540,757	2,330,914	940,900	138,975
	1979	941,646	331,750	589,888	2,649,239	988,542	133,580
	1980	1,130,063	424,570	654,781	2,982,160	1,222,011	160,807

SOURCE: Community Services Administration, Geographic Distribution of Federal Funds in Michigan in 1980 (Washington, D.C.: 1981), county summaries section; and similar documents for previous years.

TABLE VII-22. TOTAL NUMBER OF RECIPIENTS AND EXPENDITURES UNDER THE SUPPLEMENTAL SECURITY INCOME PROGRAM IN MICHIGAN, BY COUNTY: JANUARY 1980 AND 1981

	1980			1981		
		Payments			Payments	
County	Number of recipients	Total ($000)	Average per recipient	Number of recipients	Total ($000)	Average per recipient
Alcona	198	29.4	$ 148.65	181	26.6	$ 147.23
Alger	204	33.8	165.54	191	33.4	174.84
Allegan	855	127.2	148.72	796	128.7	161.67
Alpena	449	73.4	163.47	439	73.2	166.73
Antrim	280	48.7	173.99	269	48.4	179.83
Arenac	268	44.5	166.01	268	48.0	178.89
Baraga	222	31.3	141.09	219	30.8	140.86
Barry	370	62.9	170.02	366	65.9	180.20
Bay	1,267	208.5	164.55	1,234	218.6	177.14
Benzie	197	37.2	188.98	188	37.1	197.36
Berrien	2,896	455.4	157.27	2,879	491.1	170.58
Branch	830	77.2	93.00	713	77.2	108.30
Calhoun	2,244	405.1	180.54	2,199	413.2	187.91
Cass	536	80.9	150.92	513	84.1	163.91
Charlevoix	292	39.1	134.12	271	40.5	149.47
Cheboygan	325	45.5	139.12	309	47.8	154.69
Chippewa	620	108.8	175.45	597	108.1	181.11
Clare	343	50.7	147.69	350	55.3	158.02
Clinton	262	38.4	146.55	241	38.1	158.14
Crawford	102	12.7	124.67	99	14.9	150.61
Delta	737	109.9	149.16	709	108.1	152.45
Dickinson	366	41.8	114.08	364	44.1	121.30
Eaton	530	90.6	170.97	518	98.8	190.71
Emmet	312	50.3	161.20	297	50.6	170.27
Genesee	5,204	902.6	173.44	5,212	977.6	187.57
Gladwin	316	52.6	166.38	304	53.1	174.56
Gogebic	473	57.8	122.15	437	62.2	142.27
Grand Traverse	783	156.8	200.28	761	155.5	204.30
Gratiot	622	105.6	169.72	644	111.7	173.49
Hillsdale	558	106.6	191.13	546	106.8	195.69
Houghton	826	116.7	141.30	780	118.2	151.52
Huron	602	113.4	187.09	584	109.9	188.13
Ingham	2,669	444.8	166.66	2,666	103.1	181.54
Ionia	606	113.4	187.09	568	103.1	181.54
Iosco	293	35.8	122.29	273	38.7	141.62

TABLE VII-22. TOTAL NUMBER OF RECIPIENTS AND EXPENDITURES UNDER THE SUPPLEMENTAL SECURITY INCOME PROGRAM IN MICHIGAN, BY COUNTY: JANUARY 1980 AND 1981 (cont.)

	1980			1981		
		Payments			Payments	
County	Number of recipients	Total ($000)	Average per recipient	Number of recipients	Total ($000)	Average per recipient
Iron	355	45.9	$ 129.29	337	45.9	$ 136.18
Isabella	866	89.8	103.74	788	92.9	117.84
Jackson	1,590	272.2	171.19	1,542	282.8	183.41
Kalamazoo	2,430	387.5	159.47	2,311	396.2	171.45
Kalkaska	159	27.6	173.48	160	30.2	188.99
Kent	4,838	827.9	171.11	4,753	843.3	177.43
Keweenaw	60	6.3	104.81	42	5.1	121.83
Lake	304	39.2	129.03	286	37.8	132.16
Lapeer	949	130.8	137.80	887	132.2	149.04
Leelanau	100	13.0	129.80	86	11.7	135.55
Lenawee	950	174.5	183.68	947	173.6	183.35
Livingston	594	80.8	136.08	586	81.7	139.40
Luce	354	46.5	131.40	328	46.8	142.54
Mackinac	231	31.5	136.26	210	30.3	144.17
Macomb	3,841	600.8	156.41	3,802	641.7	168.78
Manistee	291	39.3	134.98	272	37.9	139.19
Marquette	734	105.2	143.33	700	108.4	154.84
Mason	376	54.3	144.49	354	52.8	149.15
Mecosta	398	59.8	150.17	381	62.0	162.65
Menominee	408	50.7	124.36	376	49.7	132.26
Midland	521	88.2	169.23	516	93.6	181.49
Missaukee	172	32.6	189.26	166	31.8	191.33
Monroe	995	138.3	138.97	984	147.2	149.59
Montcalm	776	138.1	177.93	779	145.6	186.89
Montmorency	147	17.7	120.14	140	17.7	126.09
Muskegon	2,505	371.3	148.21	2,511	407.7	162.36
Newaygo	547	76.0	138.97	511	74.9	146.54
Oakland	5,637	941.8	167.07	5,719	1,020.9	178.51
Oceana	360	50.0	138.84	327	50.4	154.08
Ogemaw	385	48.0	124.65	381	46.4	121.75
Ontonagon	243	33.4	137.62	215	33.7	156.88
Osceola	368	61.8	168.01	359	65.5	179.80
Oscoda	114	14.7	128.93	103	12.8	123.97
Otsego	286	44.5	155.73	278	46.4	167.02
Ottawa	759	138.9	183.02	740	137.0	185.19

TABLE VII-22. TOTAL NUMBER OF RECIPIENTS AND EXPENDITURES UNDER THE SUPPLEMENTAL SECURITY INCOME PROGRAM IN MICHIGAN, BY COUNTY: JANUARY 1980 AND 1981 (cont.)

	1980			1981		
		Payments			Payments	
County	Number of recipients	Total ($000)	Average per recipient	Number of recipients	Total ($000)	Average per recipient
Presque Isle	316	48.4	$ 153.34	308	51.7	$ 167.81
Roscommon	262	44.5	170.09	241	40.9	169.68
Saginaw	2,735	482.8	176.53	2,737	515.2	188.24
St. Clair	1,443	225.6	156.32	1,377	230.2	167.19
St. Joseph	587	90.9	154.89	556	89.3	160.64
Sanilac	550	104.6	190.18	525	105.0	199.93
Schoolcraft	274	53.2	194.32	257	49.5	192.77
Shiawassee	723	120.2	166.27	698	127.1	182.09
Tuscola	997	129.8	130.17	945	130.3	137.85
Van Buren	1,253	201.8	161.05	1,199	205.1	171.10
Washtenaw	1,836	317.7	173.07	1,771	328.1	185.29
Wayne	42,017	6,698.1	159.41	40,475	6,929.3	171.20
Wexford	452	74.2	164.09	449	73.5	163.61
TOTAL	114,745	18,370.1	160.10	111,400	19,069.0	171.18

SOURCE: Michigan Department of Social Services, Assistance Payments Statistics (Lansing: monthly), January 1980, Table 21, and January 1981, Table 21.

NOTE: Social Security Income comprises programs formerly under aid to the blind, aid to the aged, and aid to the disabled. The dollar amounts indicated include the federal payment as well as state supplementation.

TABLE VII-23. MONTHLY AVERAGE NUMBER OF MEDICAL ASSISTANCE (MEDICAID) RECIPIENTS, BY COUNTY, FISCAL YEARS: 1979 AND 1980

	Number			Number	
County	1979	1980	County	1979	1980
Alcona	355	456	Lake	657	723
Alger	375	395	Lapeer	2,651	2,684
Allegan	2,711	2,810	Leelanau	255	276
Alpena	1,260	1,415	Lenawee	2,586	3,053
Antrim	623	706	Livingston	1,946	2,148
Arenac	724	870	Luce	600	535
Baraga	426	460	Mackinac	418	454
Barry	1,426	1,570	Macomb	14,202	15,477
Bay	4,540	5,123	Manistee	780	890
Benzie	505	592	Marquette	1,838	2,145
Berrien	9,082	10,346	Mason	908	1,055
Branch	2,116	2,057	Mecosta	1,213	1,323
Calhoun	7,421	7,836	Menominee	738	848
Cass	1,703	2,109	Midland	2,185	2,327
Charlevoix	637	775	Missaukee	459	486
Cheboygan	898	1,005	Monroe	3,469	4,097
Chippewa	1,348	1,432	Montcalm	1,856	2,028
Clare	1,344	1,642	Montmorency	333	418
Clinton	943	1,049	Muskegon	9,218	9,849
Crawford	424	549	Newaygo	1,641	1,732
Delta	1,590	1,764	Oakland	20,484	22,166
Dickinson	692	767	Oceana	1,087	1,226
Eaton	1,666	1,920	Ogemaw	1,078	1,239
Emmet	719	769	Ontonagon	509	499
Genesee	21,237	23,476	Osceola	765	928
Gladwin	920	1,111	Oscoda	335	422
Gogebic	856	904	Otsego	575	642
Grand Traverse	1,657	1,833	Ottawa	2,479	2,737
Gratiot	1,651	1,890	Presque Isle	465	525
Hillsdale	1,398	1,569	Roscommon	719	907
Houghton	1,782	1,829	Saginaw	11,075	12,321
Huron	1,046	1,180	St. Clair	5,119	5,708
Ingham	10,713	11,264	St. Joseph	1,888	2,247
Ionia	1,943	2,073	Sanilac	1,371	1,609
Iosco	868	1,047	Schoolcraft	498	497
Iron	654	680	Shiawassee	2,039	2,371
Isabella	2,422	2,442	Tuscola	2,720	2,494
Jackson	5,596	6,118	Van Buren	4,251	4,495
Kalamazoo	7,077	7,611	Washtenaw	6,353	6,670
Kalkaska	524	604	Wayne	165,945	175,821
Kent	14,589	15,588	Wexford	1,235	1,487
Keweenaw	86	88	Michigan	397,020	429,283

SOURCE: Michigan Department of Social Services, Medical Assistance (Medicaid), Fiscal Year 1978 (Lansing: 1979), Table 7, and Medical Assistance (Medicaid), Fiscal Year 1979 (Lansing: 1980), Table 6.

TABLE VII-24. TOTAL NUMBER OF RECIPIENTS AND EXPENDITURES UNDER AID TO FAMILIES WITH DEPENDENT CHILDREN, EMERGENCY ASSISTANCE, GENERAL ASSISTANCE, AND FOOD STAMPS TO PERSONS NOT OTHERWISE RECEIVING PUBLIC ASSISTANCE IN MICHIGAN, BY COUNTY: JANUARY 1980 AND 1981

	1980			1981		
		Payments			Payments	
County	Number of recipients	Total ($000)	Average per recipient	Number of recipients	Total ($000)	Average per recipient
Alcona	1,128	89.9	$ 79.75	1,509	157.9	$ 104.64
Alger	910	81.7	89.79	1,023	107.9	105.50
Allegan	5,812	564.1	97.05	7,073	804.3	113.71
Alpena	3,298	346.1	104.94	4,115	503.1	122.27
Antrim	1,357	104.4	76.96	1,646	161.9	98.39
Arenac	2,233	205.0	91.80	2,731	299.3	109.58
Baraga	980	87.5	89.34	1,250	127.4	101.91
Barry	3,493	340.1	97.38	4,400	512.6	116.51
Bay	10,546	1,203.6	114.13	13,156	1,727.9	131.34
Benzie	1,135	94.3	83.09	1,601	148.6	92.84
Berrien	25,363	2,612.6	103.01	29,867	3,557.4	119.11
Branch	3,483	329.9	94.07	4,521	518.9	114.77
Calhoun	17,026	1,962.6	115.27	19,222	2,491.9	129.64
Cass	5,395	499.4	92.56	6,443	721.3	111.95
Charlevoix	1,544	134.8	87.28	2,048	211.4	103.23
Cheboygan	2,480	195.6	78.86	3,013	283.5	94.11
Chippewa	3,495	311.0	88.99	4,120	405.1	98.32
Clare	3,664	366.0	99.88	4,337	535.9	123.57
Clinton	2,542	271.3	106.72	3,028	371.0	122.52
Crawford	1,588	129.3	81.43	1,978	193.3	97.74
Delta	3,367	321.8	95.58	4,026	435.6	108.19
Dickinson	1,553	128.8	82.94	1,968	188.5	95.78
Eaton	4,126	433.2	105.00	5,128	608.8	118.73
Emmet	1,852	145.7	78.67	2,190	202.4	92.41
Genesee	55,378	6,806.7	122.93	63,393	8,753.1	138.08
Gladwin	2,604	244.7	93.99	3,499	416.2	118.96
Gogebic	2,165	163.7	75.65	2,354	206.1	87.58
Grand Traverse	3,074	295.4	96.11	3,971	435.8	109.76
Gratiot	3,873	163.7	91.51	4,439	482.6	108.72
Hillsdale	3,950	295.4	84.69	4,794	515.1	107.45
Houghton	3,942	357.9	90.78	4,455	460.1	103.28
Huron	2,467	206.1	83.56	3,172	320.0	100.87
Ingham	26,658	3,343.5	125.42	29,918	4,131.3	138.09
Ionia	4,098	433.9	105.87	4,907	597.6	121.79
Iosco	3,459	279.7	80.85	3,951	412.6	104.42

TABLE VII-24. TOTAL NUMBER OF RECIPIENTS AND EXPENDITURES UNDER AID TO FAMILIES WITH DEPENDENT CHILDREN, EMERGENCY ASSISTANCE, GENERAL ASSISTANCE, AND FOOD STAMPS TO PERSONS NOT OTHERWISE RECEIVING PUBLIC ASSISTANCE IN MICHIGAN, BY COUNTY: JANUARY 1980 AND 1981 (cont.)

	1980			1981		
		Payments			Payments	
County	Number of recipients	Total ($000)	Average per recipient	Number of recipients	Total ($000)	Average per recipient
Iron	1,262	94.6	$ 74.94	1,567	138.0	88.08
Isabella	4,483	464.5	103.62	4,808	597.5	124.27
Jackson	11,818	1,355.6	114.71	15,328	1,930.9	125.97
Kalamazoo	17,404	2,011.6	115.59	19,770	2,580.2	130.51
Kalkaska	1,587	132.0	83.16	1,816	180.8	99.55
Kent	31,798	3,448.2	108.44	37,385	4,487.5	120.04
Keweenaw	226	15.8	70.03	245	18.6	75.80
Lake	1,678	149.7	89.19	1,952	185.0	94.80
Lapeer	5,393	511.7	94.89	6,754	749.2	110.93
Leelanau	618	45.0	72.76	822	71.8	87.31
Lenawee	7,257	733.2	101.04	9,276	1,133.8	122.23
Livingston	4,258	479.7	112.67	5,785	733.7	126.82
Luce	761	58.6	77.02	911	93.7	102.81
Mackinac	1,194	90.4	75.76	1,397	128.0	91.61
Macomb	32,699	3,693.6	112.96	41,343	5,395.4	130.50
Manistee	1,899	189.6	99.83	2,450	275.2	112.32
Marquette	5,317	539.5	101.47	6,566	729.4	111.08
Mason	2,564	203.7	79.44	3,282	301.1	91.73
Mecosta	3,335	303.3	90.94	3,435	367.4	106.95
Menominee	2,264	199.5	88.10	2,502	250.8	100.73
Midland	5,300	556.6	105.02	6,139	779.5	126.98
Missaukee	1,096	85.8	78.27	1,401	139.0	99.19
Monroe	9,525	1,030.1	108.15	12,485	1,619.7	129.74
Montcalm	4,155	364.6	87.75	5,165	559.6	108.35
Montmorency	1,205	103.9	86.21	1,511	156.7	103.72
Muskegon	20,696	2,154.5	104.10	23,875	2,812.1	117.79
Newaygo	4,321	359.5	83.19	5,128	510.9	99.63
Oakland	43,227	5,239.7	121.21	52,959	7,209.0	136.12
Oceana	2,776	254.1	91.53	3,339	342.7	102.65
Ogemaw	2,456	220.1	89.63	2,775	309.4	111.49
Ontonagon	957	79.6	83.16	1,061	101.0	95.23
Osceola	2,216	187.0	84.40	2,799	283.8	101.41
Oscoda	889	85.7	96.41	1,069	113.1	105.82
Otsego	1,079	86.6	80.26	1,417	142.3	100.41
Ottawa	5,169	541.3	104.72	6,649	774.8	116.53

TABLE VII-24. TOTAL NUMBER OF RECIPIENTS AND EXPENDITURES UNDER AID TO FAMILIES WITH DEPENDENT CHILDREN, EMERGENCY ASSISTANCE, GENERAL ASSISTANCE, AND FOOD STAMPS TO PERSONS NOT OTHERWISE RECEIVING PUBLIC ASSISTANCE IN MICHIGAN, BY COUNTY: JANUARY 1980 AND 1981 (cont.)

	1980			1981		
		Payments			Payments	
County	Number of recipients	Total ($000)	Average per recipients	Number of recipients	Total ($000)	Average per recipient
Presque Isle	981	83.0	$ 84.63	1,319	123.6	$ 93.73
Roscommon	2,085	205.0	98.34	2,444	227.0	113.36
Saginaw	29,998	3,781.5	126.06	32,357	4,626.0	142.97
St. Clair	13,415	1,589.8	118.51	16,419	2,192.9	133.56
St. Joseph	5,386	524.8	97.44	6,685	745.9	111.57
Sanilac	4,134	376.8	91.14	5,157	551.8	107.01
Schoolcraft	932	77.1	82.78	1,032	103.7	100.52
Shiawassee	5,373	546.4	101.69	7,105	842.9	118.63
Tuscola	4,759	461.1	96.89	6,045	699.0	115.63
Van Buren	10,798	1,080.6	100.07	12,057	1,370.6	113.68
Washtenaw	14,924	1,936.2	129.73	16,506	2,306.6	139.74
Wayne	392,670	52,517.4	133.74	437,793	66,051.0	150.87
Wexford	2,988	271.7	90.92	3,675	402.1	109.41
TOTAL	951,363	113,300.8	119.09	1,103,006	148,501.6	134.63

SOURCE: Michigan Department of Social Services, Assistance Payments Statistics (Lansing: monthly), January 1980 and January 1981, Table 2.

TABLE VII-25. PAYMENTS BY STATE OF MICHIGAN TO VENDORS PROVIDING MEDICAL ASSISTANCE (MEDICAID), BY SELECTED TYPE OF SERVICE AND BY COUNTY, FISCAL YEARS: 1978, 1979, AND 1980

		Inpatient hospital						
County	Year	General hospital	Mental hospital	Skilled nursing	Intermediate care facility	Physicians	Prescribed drugs	Total[a]
Alcona	1978	$ 113,347	$ 38,264	$ 24,336	$ 405,583	$ 64,040	$ 57,679	$ 753,771
	1979	133,756	38,454	33,531	352,572	70,882	62,695	755,983
	1980	171,534	31,911	53,272	322,222	96,510	84,925	851,322
Alger	1978	198,397	766	11,838	310,615	76,662	50,835	707,990
	1979	228,001	969	22,015	306,623	79,742	58,508	772,228
	1980	354,523	823	6,558	338,322	94,619	55,055	932,173
Allegan	1978	1,231,561	111,972	1,413,670	862,156	592,848	400,271	5,268,019
	1979	1,572,469	113,955	1,688,860	1,145,075	629,666	455,104	6,223,608
	1980	1,578,994	177,298	1,143,102	1,803,791	669,849	499,547	6,504,304
Alpena	1978	563,503	124,010	580,974	221,652	293,432	175,199	2,164,783
	1979	523,174	209,934	645,112	262,452	309,482	206,875	2,419,764
	1980	735,381	190,703	446,662	515,979	331,689	239,689	2,762,650
Antrim	1978	234,676	5,564	269,699	307,134	121,723	81,174	1,100,319
	1979	215,862	31,349	146,152	458,433	139,235	97,592	1,182,939
	1980	221,275	3,720	92,499	489,679	151,653	117,377	1,187,510
Arenac	1978	365,163	8,935	202,804	114,605	181,567	93,568	1,093,793
	1979	417,769	4,483	221,082	165,139	190,445	107,844	1,243,272
	1980	468,961	2,750	223,245	263,984	232,165	138,899	1,538,906
Baraga	1978	177,200	5,879	378,679	---	66,962	72,629	758,014
	1979	231,638	32,395	318,061	3,285	66,367	73,555	786,028
	1980	215,946	26,317	329,039	24,834	106,350	89,096	869,926
Barry	1978	756,313	51,649	845,953	622,257	331,601	199,123	3,142,638
	1979	719,442	55,852	842,661	669,987	342,692	200,413	3,160,576
	1980	962,835	51,203	624,772	856,501	416,167	228,173	3,565,267
Bay	1978	2,407,529	263,977	1,748,025	976,597	1,352,580	634,783	8,137,211
	1979	3,237,561	282,923	1,735,575	1,360,042	1,524,080	694,613	9,723,279
	1980	3,470,074	320,378	1,046,695	1,594,347	1,868,530	844,957	10,245,719
Benzie	1978	269,500	17,846	161,611	139,321	115,698	77,999	862,939
	1979	331,734	346	243,652	94,245	139,160	82,806	992,624
	1980	385,473	21,927	223,724	106,582	171,962	99,319	1,134,080
Berrien	1978	4,424,882	317,990	2,479,501	1,930,678	1,818,588	1,134,125	14,331,740
	1979	5,729,760	541,279	2,778,569	2,139,623	2,165,040	1,230,940	17,115,141
	1980	6,709,052	563,301	2,022,952	2,821,618	2,549,199	1,473,643	19,317,621

TABLE VII-25. PAYMENTS BY STATE OF MICHIGAN TO VENDORS PROVIDING MEDICAL ASSISTANCE (MEDICAID), BY SELECTED TYPE OF SERVICE AND BY COUNTY, FISCAL YEARS: 1978, 1979, AND 1980

County	Year	Inpatient hospital General hospital	Inpatient hospital Mental hospital	Skilled nursing	Intermediate care facility	Physicians	Prescribed drugs	Total[a]
Branch	1978	712,132	19,215	4,232,151	12,760,839	296,583	206,415	18,528,213
	1979	715,449	59,517	2,793,217	16,146,918	304,832	199,146	20,557,472
	1980	976,768	104,206	633,169	8,984,228	380,280	240,343	11,784,197
Calhoun	1978	4,623,487	497,477	2,206,170	1,342,725	2,242,901	1,046,343	13,617,799
	1979	5,125,187	577,868	2,050,710	1,935,072	2,292,428	1,152,369	14,972,445
	1980	5,614,302	534,399	1,429,096	2,466,258	2,473,590	1,278,156	16,002,057
Cass	1978	810,640	56,370	430,925	774,671	361,323	207,305	2,976,012
	1979	1,171,214	49,568	589,707	813,931	420,687	230,178	3,659,769
	1980	1,331,372	66,941	610,851	740,150	488,168	306,250	4,156,329
Charlevoix	1978	186,359	58,097	187,982	335,440	97,202	96,277	1,043,131
	1979	237,722	19,373	220,868	368,066	113,362	107,150	1,172,074
	1980	422,930	55,264	199,592	310,979	164,586	130,320	1,441,863
Cheboygan	1978	432,379	49,063	135,256	317,512	185,653	134,891	1,415,196
	1979	454,694	109,890	219,770	329,905	196,893	135,880	1,707,821
	1980	770,121	31,475	196,260	317,637	261,737	155,670	1,953,715
Chippewa	1978	610,521	44,598	902,829	234,184	216,506	201,740	2,385,888
	1979	1,077,181	57,277	883,302	278,760	279,595	218,274	3,017,609
	1980	896,941	13,061	700,014	495,963	283,214	238,891	2,862,464
Clare	1978	539,252	28,095	649,216	326,385	341,575	192,290	2,295,104
	1979	752,055	10,786	773,287	356,508	394,783	228,0[illegible]9	2,771,686
	1980	947,296	99,097	591,785	364,598	468,545	298,596	3,437,018
Clinton	1978	383,748	57,503	3,535	454,383	219,399	113,457	1,409,083
	1979	426,452	68,995	21,951	494,354	235,182	171,813	1,550,611
	1980	639,641	10,955	30,767	475,083	280,338	137,845	1,791,651
Crawford	1978	198,056	---	94,582	---	96,537	51,413	523,364
	1979	240,062	42,912	128,797	---	99,792	55,705	670,401
	1980	370,982	36,199	90,376	27,430	140,085	78,713	893,609
Delta	1978	577,775	69,162	1,334,833	860,297	293,259	286,334	3,609,659
	1979	590,905	34,499	1,557,028	926,279	295,465	297,493	3,909,059
	1980	753,893	1,072	1,314,455	1,149,877	357,392	344,662	4,213,560
Dickinson	1978	220,090	53,225	389,775	460,406	97,721	103,249	1,412,050
	1979	253,526	33,453	434,471	552,921	97,789	108,934	1,595,200
	1980	304,917	19,053	261,399	717,986	121,481	130,065	1,693,565

TABLE VII-25. PAYMENTS BY STATE OF MICHIGAN TO VENDORS PROVIDING MEDICAL ASSISTANCE (MEDICAID), BY SELECTED TYPE OF SERVICE AND BY COUNTY, FISCAL YEARS: 1978, 1979, AND 1980

County	Year	Inpatient hospital: General hospital	Inpatient hospital: Mental hospital	Skilled nursing	Intermediate care facility	Physicians	Prescribed drugs	Total[a]
Eaton	1978	600,810	127,840	503,573	1,056,469	350,421	263,725	3,167,343
	1979	831,659	220,103	607,502	1,220,863	369,900	300,783	3,866,067
	1980	955,078	142,880	536,620	1,438,176	472,073	352,709	4,270,037
Emmet	1978	267,634	44,029	315,728	791,505	129,739	112,099	1,757,394
	1979	401,895	123,374	305,043	829,928	130,077	112,181	2,011,902
	1980	402,271	106,997	256,303	797,355	164,340	126,239	1,982,651
Genesee	1978	12,772,421	621,752	5,190,456	2,495,827	7,804,836	3,253,088	37,214,709
	1979	16,035,563	898,142	6,026,172	2,398,292	8,562,909	3,641,408	43,114,522
	1980	16,710,701	992,609	4,383,022	4,296,556	9,118,903	3,853,956	45,471,257
Gladwin	1978	487,506	8,813	189,016	11,868	258,527	133,081	1,274,575
	1979	500,783	10,630	296,531	17,830	267,064	162,410	1,456,469
	1980	688,771	19,464	214,926	130,446	329,467	194,225	1,841,557
Gogebic	1978	316,180	12,641	542,195	613,895	100,468	130,074	1,872,303
	1979	379,229	17,521	646,779	754,003	133,709	142,136	2,239,459
	1980	321,307	41,278	607,159	909,251	142,679	161,380	2,388,282
Grand Traverse	1978	760,221	2,327,439	1,977,032	567,487	336,290	258,147	6,486,240
	1979	697,338	2,087,684	2,087,684	673,697	353,103	287,860	6,567,768
	1980	888,803	1,259,664	1,607,872	1,073,725	482,548	325,957	6,001,351
Gratiot	1978	501,214	38,215	511,464	1,257,819	308,805	253,897	3,052,987
	1979	595,397	185,349	513,663	1,362,897	357,540	260,723	3,498,960
	1980	715,190	150,002	289,817	1,657,981	436,470	309,889	3,857,406
Hillsdale	1978	603,344	26,305	517,786	991,790	239,149	219,885	2,865,174
	1979	778,788	55,241	870,315	603,710	270,716	247,671	3,106,879
	1980	1,004,245	2,562	637,659	1,036,950	372,389	286,182	3,662,516
Houghton	1978	706,417	40,738	1,410,548	933,949	275,865	187,610	3.797,528
	1979	738,192	42,708	1,408,871	1,068,658	318,775	224,033	4,096,607
	1980	889,668	18,453	1,493,344	935,627	352,496	271,792	4,271,104
Huron	1978	433,274	11,342	525,095	598,524	181,376	186,139	2,083,752
	1979	569,767	26,396	593,343	602,512	230,971	208,494	2,399,016
	1980	570,451	-400	370,281	778,460	268,574	236,276	2,425,133

TABLE VII-25. PAYMENTS BY STATE OF MICHIGAN TO VENDORS PROVIDING MEDICAL ASSISTANCE (MEDICAID), BY SELECTED TYPE OF SERVICE AND BY COUNTY, FISCAL YEARS: 1978, 1979, AND 1980 (cont.)

County	Year	Inpatient hospital General hospital	Inpatient hospital Mental hospital	Skilled nursing	Intermediate care facility	Physicians	Prescribed drugs	Total[a]
Ingham	1978	$4,948,334	$470,351	$2,742,885	$1,812,712	$2,866,946	$1,210,818	$16,787,789
	1979	5,633,264	511,452	3,221,729	2,164,373	2,887,881	1,293,751	18,738,189
	1980	6,244,496	438,831	2,251,488	3,180,957	3,097,236	1,506,567	19,843,871
Ionia	1978	888,226	33,288	1,268,351	16,655	493,572	292,818	3,349,135
	1979	1,053,193	1.663	1,266,296	47,443	545,099	297,211	3,558,917
	1980	1,225,538	34,773	763,666	558,193	692,352	330,447	4,005,227
Iosco	1978	401,490	37,[illegible]11	242,307	226,240	176,550	104,761	1,350,027
	1979	378,178	152,732	667,557	190,715	192,868	136,506	1,917,809
	1980	543,843	59,119	516,718	475,531	229,362	167,571	2,256,124
Iron	1978	318,591	43,426	264,251	1,292,449	90,561	114,949	2,221,579
	1979	448,754	13,164	347,402	1,289,346	107,489	138,763	2,457,276
	1980	538,067	35,200	340,718	1,192,588	128,378	151,359	2,518,066
Isabella	1978	918,223	18,263	5,598,891	8,086,356	495,541	239,932	15,693,822
	1979	1,038,289	23,534	3,306,530	11,877,116	547,040	287,352	17,452,321
	1980	1,182,064	39,846	1,972,768	8,729,652	638,890	321,591	13,336,560
Jackson	1978	3,360,488	368,902	1,326,997	2,61[illegible]795	1,552,153	837,701	11,231,555
	1979	3,717,493	533,084	1,395,952	3,00[illegible],506	1,787,831	890,237	12,584,538
	1980	3,876,922	684,871	1,008,924	2,820,693	2,150,227	1,108,294	13,143,588
Kalamazoo	1978	3,304,870	3,135,142	4,640,321	1,796,270	1,500,331	840,579	17,153,105
	1979	3,948,364	3,199,429	4,885,909	2,133,503	1,503,848	910,733	18,882,735
	1980	4,538,134	1,591,518	4,707,260	2,488,131	1,679,389	1,063,001	18,520,499
Kalkaska	1978	270,941	4,290	39,889	60,154	119,184	63,710	650,913
	1979	361,270	17,868	39,174	107,532	123,087	65,816	817,973
	1980	396,337	-10,927	30,469	136,518	165,508	76,528	922,395
Kent	1978	6,381,461	870,825	5,979,994	4,934,042	3,314,521	1,832,424	26,577,587
	1979	6,807,548	1,364,252	8,053,848	3,919,608	3,215,745	2,047,826	28,869,142
	1980	7,490,747	1,311,616	6,137,030	5,929,912	3,676,025	2,367,466	30,646,090
Keweenaw	1978	32,418	2,384	---	---	15,979	12,425	75,902
	1979	31,769	5,765	---	---	18,269	13,007	84,164
	1980	20,543	4,855	1,216	1,167	11,816	17,146	71,009
Lake	1978	250,139	1,549	9,755	5,500	106,875	95,434	594,540
	1979	275,769	---	32,675	30,884	113,817	106,768	714,749
	1980	392,578	2,652	17,154	100,672	136,640	128,133	953,329

TABLE VII-25. PAYMENTS BY STATE OF MICHIGAN TO VENDORS PROVIDING MEDICAL ASSISTANCE (MEDICAID), BY SELECTED TYPE OF SERVICE AND BY COUNTY, FISCAL YEARS: 1978, 1979, AND 1980

County	Year	Inpatient hospital General hospital	Inpatient hospital Mental hospital	Skilled nursing	Intermediate care facility	Physicians	Prescribed drugs	Total[a]
Lapeer	1978	932,792	58,218	1,884,392	17,923,294	509,199	282,461	21,875,592
	1979	999,419	131,717	1,221,218	19,285,827	549,493	307,480	22,836,538
	1980	1,160,460	105,165	450,749	16,379,438	645,368	359,291	19,552,356
Leelanau	1978	118,251	2,710	159,531	388,869	49,538	33,037	798,409
	1979	162,157	1,969	135,807	323,033	59,519	31,614	760,644
	1980	141,447	21,832	165,448	323,811	62,779	34,681	810,281
Lenawee	1978	1,358,961	216,768	1,010,418	956,657	522,652	299,119	4,828,773
	1979	1,498,994	337,990	1,098,217	1,044,627	535,725	310,954	5,370,547
	1980	1,547,037	151,075	764,135	1,318,240	691,610	387,199	5,526,363
Livingston	1978	714,480	78,140	2,263,505	5,620,431	398,213	237,068	9,674,537
	1979	1,108,093	53,921	1,442,695	6,765,939	427,337	258,705	10,436,976
	1980	1,039,969	135,243	165,244	7,262,098	504,746	337,047	9,940,424
Luce	1978	243,569	259,708	2,869	5,928,007	88,822	59,624	6,637,511
	1979	216,643	5,765	6,422	6,512,903	77,420	56,618	6,935,189
	1980	223,152	740	1,557	5,051,371	80,878	62,676	5,501,698
Mackinac	1978	173,786	- 2,908	102,960	151,719	85,027	55,303	628,005
	1979	280,889	14,188	114,161	171,769	90,404	58,088	793,967
	1980	274,482	12,686	71,470	305,689	107,002	65,786	931,848
Macomb	1978	7,052,535	658,858	8,195,955	6,850,029	4,655,592	2,113,068	32,698,668
	1979	8,486,987	1,247,529	8,552,661	8,538,259	4,810,946	2,306,298	37,368,106
	1980	8,904,393	707,231	6,776,040	8,564,465	5,388,644	2,680,920	36,906,712
Manistee	1978	267,874	---	374,176	798,142	115,688	90,167	1,787,258
	1979	394,146	9,003	467,669	738,968	129,304	101,047	1,996,065
	1980	511,126	10,115	338,713	637,108	182,489	118,112	1,990,593
Marquette	1978	699,064	57,508	821,925	949,604	410,697	229,614	3,461,033
	1979	994,804	126,051	1,239,947	875,920	452,934	285,972	4,332,484
	1980	1,248,987	74,795	862,449	1,141,436	534,742	344,833	4,636,821
Mason	1978	252,759	13,228	979,592	104,116	126,349	119,003	1,753,162
	1979	264,210	30,562	1,122,233	166,385	164,426	131,464	2,064,163
	1980	453,711	-345	928,251	227,350	228,341	165,051	2,229,987
Mecosta	1978	499,596	35,890	761,786	15,238	253,913	197,201	2,020,247
	1979	716,158	50,730	672,407	49,901	278,907	210,618	2,312,258
	1980	790,816	68,277	499,200	281,800	327,543	226,563	2,537,257

TABLE VII-25. PAYMENTS BY STATE OF MICHIGAN TO VENDORS PROVIDING MEDICAL ASSISTANCE (MEDICAID), BY SELECTED TYPE OF SERVICE AND BY COUNTY, FISCAL YEARS: 1978, 1979, AND 1980

County	Year	Inpatient hospital General hospital	Inpatient hospital Mental hospital	Skilled nursing	Intermediate care facility	Physicians	Prescribed drugs	Total[a]
Menominee	1978	306,570	2,763	113,466	594,538	124,896	112,107	1,313,195
	1979	297,027	51,406	101,647	610,540	147,558	109,780	1,395,867
	1980	472,903	-53,844	34,755	611,033	180,060	126,629	1,493,576
Midland	1978	926,929	77,474	1,327,428	43,746	502,045	295,014	3,624,887
	1979	905,453	141,025	1,440,529	250,606	562,667	316,372	4,151,526
	1980	1,238,723	145,538	833,554	654,156	605,267	366,233	4,454,374
Missaukee	1978	242,030	1,236	105,476	57,462	100,263	70,303	640,966
	1979	385,093	- 1,001	121,424	53,560	123,836	73,510	779,884
	1980	336,946	9,973	88,891	11,552	128,229	82,397	751,374
Monroe	1978	1,833,917	91,207	2,225,985	121,317	844,728	566,859	7,476,026
	1979	2,401,261	335,655	2,321,903	1,422,906	1,025,818	647,085	9,027,888
	1980	3,005,133	362,937	2,200,993	1,669,994	1,319,476	747,838	10,329,619
Montcalm	1978	797,934	73,747	584,688	439,194	464,370	291,241	2,963,375
	1979	1,054,757	83,337	641,387	366,126	485,938	308,647	3,269,993
	1980	1,164,109	92,366	399,663	578,595	578,653	349,026	3,574,780
Montmorency	1978	135,953	9,356	6,666	6,837	72,770	48,733	342,094
	1979	230,902	33,218	10,683	---	104,942	56,584	516,917
	1980	245,115	19,212	491	4,573	141,661	71,072	585,128
Muskegon	1978	4,034,052	508,188	2,406,892	8,946,389	2,241,038	1,210,501	21,263,239
	1979	4,597,256	340,997	2,859,601	10,948,714	2,417,016	1,361,449	24,551,981
	1980	5,147,407	462,481	2,095,893	11,292,967	2,807,830	1,724,415	25,927,721
Newaygo	1978	659,861	134,427	1,205,616	312,359	304,087	231,792	3,232,461
	1979	847,335	66,986	1,307,095	360,418	313,971	252,100	3,599,285
	1980	883,657	14,920	1,009,367	56,586	375,502	283,295	3,600,695
Oakland	1978	10,368,656	6,761,644	8,422,468	6,673,815	6,478,148	3,171,988	46,927,782
	1979	12,788,915	6,281,601	9,538,644	8,875,608	6,597,495	3,391,618	53,003,641
	1980	14,320,148	2,246,976	7,434,767	9,521,110	7,518,622	3,993,538	51,314,027
Oceana	1978	379,727	9,449	470,892	197,779	219,841	130,869	1,609,177
	1979	492,819	9,280	472,947	346,743	229,209	141,639	1,932,380
	1980	701,753	45,189	419,893	331,172	296,954	175,153	2,285,196
Ogemaw	1978	382,314	30,787	1,252,115	450,972	246,096	266,495	2,804,035
	1979	445,803	68,669	1,406,727	981,571	261,302	288,970	3,172,856
	1980	683,147	32,553	1,386,112	571,348	329,734	309,329	3,534,931

TABLE VII-25. PAYMENTS BY STATE OF MICHIGAN TO VENDORS PROVIDING MEDICAL ASSISTANCE (MEDICAID), BY SELECTED TYPE OF SERVICE AND BY COUNTY, FISCAL YEARS: 1978, 1979, AND 1980 (cont.)

		Inpatient hospital						
County	Year	General hospital	Mental hospital	Skilled nursing	Intermediate care facility	Physicians	Prescribed drugs	Total[a]
Ontonagon	1978	220,218	28,338	279,509	419,549	85,022	78,881	1,162,157
	1979	274,000	13,494	299,236	465,680	95,726	87,988	1,293,456
	1980	358,014	10,714	283,859	483,791	109,116	105,325	1,411,668
Osceola	1978	356,849	20,654	242,606	165,372	180,482	94,516	1,198,684
	1979	387,353	16,019	236,579	197,024	174,417	106,882	1,256,010
	1980	612,343	30,062	87,063	285,297	242,090	140,361	1,630,710
Oscoda	1978	117,457	4,443	3,004	137,882	64,251	55,715	440,738
	1979	136,122	16,159	34,807	144,076	75,057	60,505	515,695
	1980	201,689	5,271	101,500	151,892	100,295	76,848	708,608
Otsego	1978	177,762	37,220	3,070,906	510,407	119,408	53,475	4,068,930
	1979	173,869	38,570	2,837,457	1,732,594	142,100	67,261	5,101,585
	1980	564,029	32,275	237,522	3,938,994	164,755	85,929	5,133,042
Ottawa	1978	889,981	61,839	2,797,560	1,316,398	478,362	463,211	6,411,467
	1979	732,824	100,319	3,138,940	1,529,544	427,205	495,762	6,823,034
	1980	1,093,510	222,516	2,298,182	2,367,957	581,203	556,708	7,618,313
Presque Isle	1978	194,836	68,932	285,864	80,077	84,961	71,593	840,972
	1979	194,722	39,511	157,959	327,266	87,338	82,134	951,285
	1980	358,612	47,081	116,103	304,116	108,809	94,095	1,011,623
Roscommon	1978	344,857	16,404	10,425	274,532	161,380	122,999	1,074,844
	1979	315,060	20,533	50,911	259,141	172,916	141,420	1,110,859
	1980	462,020	19,121	34,954	315,284	234,436	188,209	1,458,133
Saginaw	1978	5,497,140	423,408	2,453,309	2,810,916	2,849,833	1,250,327	17,476,602
	1979	7,083,948	458,721	2,512,987	3,203,393	3,153,666	1,374,506	20,114,626
	1980	8,418,721	427,198	1,894,645	3,508,072	3,683,007	1,647,273	22,326,067
St. Clair	1978	2,323,642	280,150	1,578,725	617,435	1,322,059	545,951	7,744,888
	1979	2,688,239	298,714	1,692,718	715,561	1,441,145	579,216	8,689,424
	1980	3,096,386	248,068	1,260,555	1,000,625	1,779,257	749,185	9,645,963
St. Joseph	1978	826,360	18,712	865,901	329,722	339,328	259,052	2,990,018
	1979	1,309,383	133,380	1,094,717	380,918	416,174	309,492	4,105,860
	1980	1,227,165	68,343	871,563	892,445	520,201	389,039	4,527,717
Sanilac	1978	751,103	31,615	277,797	504,487	294,121	161,237	2,239,612
	1979	810,505	58,120	284,973	588,070	321,799	197,579	2,532,670
	1980	779,120	25,821	332,745	677,357	410,655	246,878	2,790,412

TABLE VII-25. PAYMENTS BY STATE OF MICHIGAN TO VENDORS PROVIDING MEDICAL ASSISTANCE (MEDICAID), BY SELECTED TYPE OF SERVICE AND BY COUNTY, FISCAL YEARS: 1978, 1979, AND 1980

County	Year	Inpatient hospital		Skilled nursing	Intermediate care facility	Physicians	Prescribed drugs	Total[a]
		General hospital	Mental hospital					
Schooicraft	1978	161,411	---	118,403	433,526	96,724	72,475	955,495
	1979	221,138	5,944	134,662	504,881	101,047	78,880	1,143,410
	1980	217,555	4,901	145,330	445,290	92,007	87,724	1,107,919
Shiawassee	1978	857,487	40,263	484,520	646,842	457,559	245,412	3,119,765
	1979	1,048,948	17,518	837,846	645,542	485,212	273,864	3,766,326
	1980	1,329,237	16,809	764,656	859,715	661,489	319,235	4,456,423
Tuscola	1978	797,432	48,938	2,497,038	8,147,589	334,128	225,301	12,333,016
	1979	1,122,199	157,197	2,680,384	10,794,619	431,430	253,183	15,813,916
	1980	1,279,870	99,832	618,011	8,028,295	552,274	323,166	11,353,510
Van Buren	1978	1,913,570	84,022	1,317,581	705,827	872,949	540,420	6,487,954
	1979	2,729,680	229,052	1,354,337	971,373	968,476	620,940	8,101,663
	1980	2,810,549	112,808	1,070,089	1,293,284	1,052,418	718,068	8,432,184
Washtenaw	1978	3,769,121	3,024,212	2,581,382	1,080,254	1,728,883	878,033	14,726,062
	1979	5,124,942	3,876,432	2,879,651	1,002,645	1,747,325	892,747	17,458,118
	1980	6,343,449	2,305,710	1,753,793	1,908,382	2,084,284	1,021,161	17,451,267
Wayne	1978	149,429,612	19,068,670	39,750,946	57,676,115	55,157,282	21,794,021	390,128,411
	1979	169,209,759	23,717,447	46,511,908	74,889,335	59,371,043	24,824,213	451,678,893
	1980	184,995,667	15,179,938	34,773,631	80,469,697	68,763,645	29,995,318	470,282,390
Wexford	1978	567,596	24,880	530,038	233,686	227,820	194,930	1,976,335
	1979	737,007	86,134	872,992	18,826	283,539	209,007	2,436,498
	1980	1,055,274	83,280	767,306	201,984	388,803	252,568	3,028,624
TOTAL	1978	260,138,756	42,485,300	146,305,193	188,726,999	133,850,463	53,479,511	900,528,057
	1979	303,566,964	50,618,201	158,837,674	230,006,861	122,167,123	59,559,816	1,031,887,588
	1980	337,497,796	32,882,779	114,753,840	238,594,232	141,417,745	70,574,941	1,054,317,892

SOURCE: Michigan Department of Social Services, Medical Assistance (Medicaid) Fiscal Year 1980 (Lansing: 1981), Table 10.

a. See Table VII-14 for a complete listing of items included in the total.

TABLE VII-26. RANKING OF MICHIGAN COUNTIES ACCORDING TO THE PERCENTAGE OF TOTAL POPULATION IN FAMILIES OR HOUSEHOLDS THAT RECEIVED GENERAL ASSISTANCE OR AID TO FAMILIES WITH DEPENDENT CHILDREN FROM THE STATE OF MICHIGAN, FISCAL YEAR: 1980

County	1980		County	1980	
	Number	Percentage		Number	Percentage
Lake	1,708	21.9	Gratiot	4,093	10.1
Van Buren	11,939	17.9	Ingham	27,491	10.1
Wayne	406,990	17.5	Mason	2,663	10.1
Crawford	1,628	17.2	Hillsdale	4,169	9.9
Montmorency	1,283	17.2	Iron	1,352	9.9
Arenac	2,421	16.4	Bay	11,648	9.7
Berrien	27,737	16.2	Montcalm	4,548	9.6
Clare	3,851	16.2	Branch	3,767	9.4
Oceana	3,478	15.9	Antrim	1,504	9.3
Ogemaw	2,498	15.2	Delta	3,601	9.2
Kalkasak	1,627	14.9	Tuscola	5,213	9.2
Gladwin	2,785	14.0	Menominee	2,371	9.0
Muskegon	21,852	13.9	Lenawee	7,990	8.9
Saginaw	30,786	13.5	Meconsta	3,272	8.9
Oscoda	916	13.4	Ionia	4,475	8.7
Roscommon	2,131	13.1	Kalamazoo	18,162	8.6
Wesfrod	3,197	12.8	Emmet	1,941	8.5
Genesee	57,129	12.7	Isabella	4,569	8.5
Alcona	1,228	12.6	Charlevoix	1,678	8.4
Newaygo	4,403	12.6	Shiawassee	5,971	8.4
Osceola	2,362	12.5	Jackson	12,604	8.3
Calhoun	17,447	12.4	Lapeer	5,725	8.2
Iosco	3,506	12.4	Otsego	1,182	7.9
Baraga	1,041	12.3	Allegan	6,355	7.8
Chippewa	3,562	12.3	Barry	3,586	7.8
Cheboygan	2,469	12.0	Monroe	10,456	7.8
Benzie	1,310	11.7	Kent	34,083	7.7
Luce	781	11.7	Marquette	5,691	7.7
Gogebic	2,275	11.6	Midland	5,581	7.6
Mackinac	1,183	11.6	Presque Isle	1,048	7.5
Keweenaw	224	11.4	Huron	2,550	7.0
Cass	5,603	11.3	Grand Traverse	3,415	6.2
Missaukee	1,134	11.3	Dickinson	1,538	6.0
Alpena	3,511	10.9	Leelanau	841	6.0
Ontonagon	1,060	10.8	Washtenaw	15,767	6.0
Sanilac	4,406	10.8	Eaton	4,480	5.1
Houghton	4,060	10.7	Clinton	2,769	5.0
Manistee	2,408	10.5	Macomb	34,514	5.0
St. Joseph	5,890	10.5	Livingston	4,719	4.7
Schoolcraft	904	10.5	Oakland	46,185	4.6
Alger	953	10.3	Ottawa	5,718	3.6
St. Clair	14,180	10.2	Michigan	999,141	10.8

SOURCE: Developed from figures supplied by the Michigan Department of Social Services, special release.
NOTE: Figures represent averages of twelve monthly recipient tallies as percentages of the April population.

TABLE VII-27. TRANSFER PAYMENTS PER CAPITA AND RANKING OF MICHIGAN COUNTIES ACCORDING TO TRANSFER PAYMENTS AS A PERCENTAGE OF PERSONAL INCOME: 1979

County	Per capita	Percentage	County	Per capita	Percentage
Lake	$ 1,819	31.9	Emmet	$ 1,254	16.1
Roscommon	1,887	31.7	Ionia	1,055	15.1
Keweenaw	1,857	31.5	Huron	1,183	14.9
Oscoda	1,364	31.0	Muskegon	1,152	14.9
Montmorency	1,866	30.6	Otsego	1,087	14.8
Alcona	1,752	29.8	Leelanau	1,035	14.5
Gogebic	1,845	27.8	St. Clair	1,130	14.5
Ontonagon	1,550	26.6	Hillsdale	1,102	14.4
Chippewa	1,514	26.2	Isabella	895	14.3
Ogemaw	1,465	26.0	Berrien	1,159	14.0
Clare	1,523	25.6	Marquette	1,002	13.6
Iron	1,624	25.2	Branch	1,128	13.5
Schoolcraft	1,642	25.1	Calhoun	1,228	13.4
Houghton	1,529	24.7	Wayne	1,354	13.4
Crawford	1,296	22.8	St. Joseph	1,096	13.3
Osceola	1,305	22.8	Grand Traverse	1,170	13.2
Alger	1,218	22.5	Gratiot	1,032	13.1
Arenac	1,415	21.9	Allegan	965	13.0
Gladwin	1,315	21.9	Tuscola	1,001	12.6
Baraga	1,358	21.6	Barry	875	12.3
Cheboygan	1,403	21.3	Cass	1,002	12.3
Mackinac	1,333	21.3	Bay	1,010	12.0
Benzie	1,431	20.8	Lenawee	1,024	12.0
Missaukee	1,123	20.7	Jackson	983	11.5
Presque Isle	1,283	20.5	Shiawassee	966	11.4
Delta	1,354	20.4	Ingham	1,079	11.2
Iosco	1,263	20.4	Saginaw	1,036	11.2
Mecosta	1,036	20.1	Kent	977	10.8
Antrim	1,347	19.8	Lapeer	840	10.7
Wexford	1,434	19.7	Genesee	1,045	10.7
Luce	1,473	19.6	Kalamazoo	967	10.3
Manistee	1,361	19.2	Monroe	875	10.2
Oceana	1,239	19.1	Eaton	804	9.2
Kalkaska	967	18.5	Washtenaw	949	9.2
Van Buren	1,336	17.8	Ottawa	751	8.8
Mason	1,212	17.7	Clinton	701	8.4
Newaygo	1,102	17.6	Midland	777	8.1
Alpena	1,249	17.3	Macomb	811	8.0
Montcalm	1,203	17.2	Livingston	629	7.9
Sanilac	1,230	17.2	Oakland	893	7.5
Charlevoix	1,229	16.8			
Menominee	1,085	16.6	Michigan	1,097	11.7
Dickinson	1,371	16.2	United States	1,141	13.0

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

TABLE VII-28. MICHIGAN COUNTIES RANKED ACCORDING TO SOCIAL SECURITY BENEFITS (OLD AGE, SURVIVORS, AND DISABILITY INSURANCE) AS A PERCENTAGE OF TOTAL PERSONAL INCOME: 1979

County	Dollar amount ($000)	As a percentage of income	County	Dollar amount ($000)	As a percentage of income
Keweenaw	2,400	17.7	Huron	22,667	8.0
Roscommon	17,089	17.7	Emmet	13539	7.9
Montmorency	7,784	16.6	Van Buren	35,970	7.7
Lake	6,730	16.4	Otsego	8,359	7.6
Alcona	8,687	16.1	Muskegon	85,006	6.9
Oscoda	5,062	16.0	Hillsdale	20,811	6.8
Iron	12,995	13.7	Leelanau	6,867	6.8
Gogebic	17,518	13.5	St. Joseph	29,026	6.7
Ogemaw	11,812	13.0	Berrien	90,476	6.6
Clare	17,362	12.2	Ionia	22,867	6.6
Ontonagon	7,012	12.1	Branch	20,832	6.4
Osceola	11,925	11.5	Gratiot	19,563	6.3
Gladwin	12,848	11.2	Grand Traverse	27,726	6.2
Houghton	24,998	11.2	Barry	18,661	6.1
Schoolcraft	6,325	11.1	Allegan	33,719	6.0
Presque Isle	9,718	11.0	Lenawee	42,778	5.8
Baraga	5,947	10.9	Tuscola	24,967	5.8
Alger	5,819	10.8	Bay	56,222	5.6
Arenac	9,616	10.6	Calhoun	71,986	5.6
Mackinac	7,035	10.4	Jackson	71,639	5.6
Crawford	5,496	10.3	Cass	20,347	5.5
Missaukee	5,430	10.0	Marquette	30,679	5.5
Chippewa	16,735	9.9	Kent	205,781	5.2
Manistee	15,295	9.8	Wayne	1,208,586	5.1
Iosco	17,629	9.5	Isabella	15,987	4.9
Antrim	10,643	9.4	Saginaw	102,036	4.9
Oceana	12,723	9.3	Shiawassee	28,955	4.8
Benzie	6,982	9.2	Genesee	197,171	4.5
St. Clair	95,441	9.2	Kalamazoo	86,937	4.5
Cheboygan	12,127	9.1	Monroe	50,461	4.5
Luce	4,669	8.9	Ottawa	59,647	4.5
Wexford	14,513	8.9	Lapeer	23,539	4.3
Menominee	15,410	8.7	Ingham	105,912	4.1
Kalkaska	5,463	8.6	Livingston	28,832	3.7
Mason	14,690	8.6	Macomb	246,773	3.7
Dickinson	18,346	8.5	Clinton	16,471	3.6
Charlevoix	11,987	8.4	Eaton	26,228	3.6
Newaygo	17,733	8.4	Midland	24,420	3.6
Mecosta	14,744	8.2	Oakland	420,947	3.4
Montcalm	26,468	8.2	Washtenaw	78,882	3.0
Delta	21,299	8.1			
Sanilac	23,144	8.1	Michigan	4,306,137	5.0
Alpena	19,215	8.0	United States	102,581,000	5.3

SOURCE: Developed from Bureau of Economic Analysis, Regional Economics Information System.

TABLE VII-29. MICHIGAN COUNTIES RANKED ACCORDING TO PUBLIC ASSISTANCE (WELFARE) BENEFITS AS A PERCENTAGE OF TOTAL PERSONAL INCOME: 1979

County	Dollar amount ($000)	As a percentage of income	County	Dollar amount ($000)	As a percentage of income
Lake	2,004	4.9	Presque Isle	1,482	1.7
Van Buren	15,459	3.3	Gladwin	1,886	1.6
Clare	4,499	3.2	Gratiot	5,061	1.6
Oscoda	1,027	3.2	Ingham	42,881	1.6
Ogemaw	2,858	3.1	Mason	2,698	1.6
Arenac	2,747	3.0	Menominee	2,778	1.6
Chippewa	4,974	2.9	Allegan	8,185	1.5
Kalkaska	1,779	2.8	Antrim	1,730	1.5
Wayne	670,083	2.8	Bay	15,447	1.5
Crawford	1,450	2.7	Cass	5,741	1.5
Montmorency	1,271	2.7	Hillsdale	4,569	1.5
Oceana	3,648	2.7	St. Joseph	6,528	1.5
Osceola	2,818	2.7	Tuscola	6,584	1.5
Schoolcraft	1,562	2.7	Barry	4,416	1.4
Alger	1,378	2.6	Charlevoix	1,934	1.4
Roscommon	2,464	2.6	Jackson	18,074	1.4
Baraga	1,363	2.5	Kalamazoo	27,157	1.4
Berrien	34,847	2.5	Branch	4,206	1.3
Missaukee	1,377	2.5	Huron	3,688	1.3
Ontonagon	1,451	2.5	Kent	49,544	1.3
Muskegon	29,454	2.4	Lenawee	9,649	1.3
Alcona	1,220	2.3	Emmet	2,087	1.2
Keweenaw	309	2.3	Lapeer	6,607	1.2
Newaygo	4,777	2.3	Otsego	1,374	1.2
Luce	1,156	2.2	Shiawassee	7,382	1.2
Mackinac	1,454	2.2	Grand Traverse	4,923	1.1
Mecosta	3,922	2.2	Midland	7,414	1.1
Saginaw	46,892	2.2	Monroe	12,262	1.1
Wexford	3,578	2.2	Isabella	3,274	1.0
Benzie	1,597	2.1	Washtenaw	26,216	1.0
Gogebic	2,775	2.1	Dickinson	1,853	.9
Alpena	4,770	2.0	Houghton	1,818	.8
Calhoun	26,172	2.0	Leelanau	679	.8
Cheboygan	2,701	2.0	Clinton	3,165	.7
Delta	4,935	1.9	Eaton	5,463	.7
Genesee	83,452	1.9	Livingston	5,728	.7
St. Clair	19,861	1.9	Macomb	45,937	.6
Sanilac	5,393	1.9	Oakland	68,859	.6
Ionia	6,075	1.8	Ottawa	7,368	.6
Iron	1,693	1.8	Marquetta	2,316	.4
Montcalm	5,840	1.8			
Iosco	3,086	1.7	Michigan	1,474,989	1.7
Manistee	2,655	1.7	United States	26,909,000	1.4

SOURCE: Developed from Bureau of Economic Analysis, Regional Economics Information System

TABLE VII-30. RANKING OF MICHIGAN COUNTIES ACCORDING TO PERCENTAGE CHANGE IN THE NUMBER OF PEOPLE RECEIVING BENEFITS UNDER THE REGULAR AND UNEMPLOYED PARENT AID TO DEPENDENT CHILDREN PROGRAMS, ANNUAL AVERAGES: 1979-1980

County	Number		Percentage change	County	Number		Percentage change
	1979	1980			1979	1980	
Oscoda	411	557	35.5	Oceana	1,505	1,724	14.6
Alcona	474	638	34.6	Bay	6,498	7,405	14.0
Roscommon	907	1,215	34.0	Ottawa	3,112	3,531	13.5
Montmorency	460	610	32.6	Kalamazoo	789	887	12.4
Otsego	457	606	32.6	Ionia	2,565	2,870	11.9
Branch	1,819	2,369	30.2	Lake	783	876	11.9
Cass	2,609	3,383	29.7	Missaukee	559	624	11.6
Iosco	1,313	1,685	28.3	Montcalm	2,378	2,653	11.6
Manistee	990	1,270	28.3	Benzie	590	657	11.4
Crawford	659	839	27.3	Jackson	8,245	9,179	11.3
Monroe	5,491	6,961	26.8	Baraga	476	529	11.1
Lenawee	4,075	5,146	26.3	Genesee	37,544	41,700	11.1
Charlevoix	759	957	26.1	Dickinson	743	823	10.8
Clare	2,013	2,529	25.6	Macomb	20,326	22,497	10.7
Livingston	2,584	3,234	25.2	Isabella	2,774	3,068	10.6
Gladwin	1,386	1,732	25.0	Iron	594	655	10.3
Wexford	1,515	1,879	24.0	Barry	2,034	2,235	9.9
Huron	1,125	1,389	23.5	Saginaw	20,482	22,453	9.6
Hillsdale	1,849	2,282	23.4	Newaygo	2,198	2,397	9.1
Tuscola	2,737	3,374	23.3	Chippewa	1,851	2,014	8.8
St. Joseph	2,922	3,594	23.0	Berrien	15,569	16,916	8.7
Arenac	1,088	1,336	22.8	Midland	3,484	3,781	8.5
Antrim	638	780	22.3	St. Clair	9,082	9,848	8.4
Lapeer	2,707	3,302	22.0	Cheboygan	1,169	1,264	8.1
Eaton	2,296	2,797	21.8	Oakland	31,116	33,406	7.4
Ogemaw	1,201	1,463	21.8	Wayne	270,991	291,035	7.4
Clinton	1,570	1,910	21.7	Muskegon	14,132	14,969	5.9
Mason	1,075	1,301	21.0	Allegan	3,732	3,941	5.6
Grand Traverse	1,661	2,005	20.7	Kalamazoo	11,926	12,582	5.5
Leelanau	269	324	20.5	Calhoun	11,485	12,029	4.7
Menominee	1,084	1,306	20.5	Van Buren	6,461	6,749	4.5
Delta	1,806	21,55	19.3	Mackinac	567	592	4.4
Marquette	2,949	3,506	18.9	Kent	22,693	23,600	4.0
Shiawassee	3,347	3,959	18.3	Washtenaw	10,564	10,964	3.8
Luce	329	389	18.2	Ingham	18,965	19,330	1.9
Gratiot	2,115	2,498	18.1	Alger	549	554	.9
Sanilac	2,141	2,526	18.0	Schoolcraft	518	515	-.6
Emmet	770	907	17.8	Houghton	2,146	2,110	-1.7
Osceola	1,127	1,317	16.7	Gogebic	1,096	1,051	-4.1
Alpena	1,892	2,203	16.4	Keweenaw	95	85	-10.5
Presque Isle	479	557	16.3	Ontonagon	590	521	-11.7
Mecosta	1,685	1,943	15.3	Michigan	621,691	679,352	9.3

SOURCE: Michigan Department of Social Services, special release.

TABLE VII-31. RANKING OF MICHIGAN COUNTIES ACCORDING TO PERCENTAGE CHANGE IN THE NUMBER OF PEOPLE RECEIVING BENEFITS UNDER THE GENERAL ASSISTANCE PROGRAM, FISCAL YEAR AVERAGES: 1979-1980

County	Number		Percentage change	County	Number		Percentage change
	1979	1980			1979	1980	
Alcona	19	51	168.4	Muskegon	805	1,046	29.9
Presque Isle	23	60	160.9	Isabella	158	205	29.8
Oscoda	20	47	135.0	Wayne	34,852	45,197	29.7
Monroe	282	635	125.2	Ionia	268	345	28.7
Charlevoix	38	82	115.8	Barry	151	192	27.2
Mason	56	120	114.3	Lapeer	180	229	27.2
Wexford	65	137	110.8	Jackson	529	670	26.7
Grand Traverse	57	118	107.0	Eaton	195	243	24.6
Antrim	22	42	90.9	Ontonagon	45	56	24.4
Livingston	111	207	86.5	Clare	153	188	22.9
Otsego	14	25	78.6	Midland	239	291	21.8
Hillsdale	111	196	76.6	Genesee	2,581	3,119	20.8
Alpena	137	240	75.2	Saginaw	2,434	2,906	19.4
Cass	125	213	70.4	Ogemaw	96	112	16.7
Berrien	688	1,153	67.6	Lake	79	92	16.5
Luce	21	35	66.7	Montcalm	158	184	16.5
Shiawassee	155	258	66.5	Oakland	2,100	2,421	15.3
St. Joseph	180	297	65.0	Allegan	197	226	14.7
Leelanau	11	18	63.6	Kent	1,373	1,520	10.7
Manistee	100	162	62.0	Menominee	94	104	10.6
Marquette	207	330	59.4	Iron	35	38	8.6
Cheboygan	55	85	54.6	Montmorency	62	66	6.5
Roscommon	114	176	54.4	Tuscola	186	198	6.5
Crawford	39	60	53.9	Osceola	90	95	5.6
Mackinac	21	32	52.4	Alger	58	61	5.2
Branch	128	195	52.3	Calhoun	1,207	1,268	5.1
Huron	98	147	50.0	Newaygo	142	148	4.2
Emmet	58	86	48.3	Ingham	1,890	1,948	3.1
Macomb	1,194	1,765	47.8	Schoolcraft	41	40	-2.4
Ottawa	143	211	47.6	Arenac	134	127	-5.2
Clinton	78	114	46.2	Washtenaw	1,135	1,076	-5.2
Iosco	144	210	45.8	Chippewa	157	148	-5.7
Lenawee	182	265	45.6	Kalkaska	62	57	-8.1
Kalamazoo	693	969	39.8	Benzie	48	43	-10.4
St. Clair	700	976	39.4	Van Buren	597	508	-14.9
Gladwin	69	95	37.7	Oceana	142	120	-15.5
Missaukee	25	34	36.0	Dickinson	30	25	-16.7
Gratiot	84	114	35.7	Houghton	448	353	-21.2
Mecosta	88	117	33.0	Gogebic	126	84	-33.3
Delta	158	208	31.7	Keweenaw	24	15	-37.5
Sanilac	142	187	31.7	Baraga	121	72	-40.5
Bay	614	803	30.8	Michigan	60,691	77,111	27.1

SOURCE: Developed from figures supplied by the Michigan Department of Social Services, special release.

The Michigan Department of State Police compiles data on criminal offenses, arrests, and stolen property within the state of Michigan. It publishes these data in the monthly Uniform Crime Report Bulletin, the semi-annual crime summary, and the annual Uniform Crime Report, which is usually published in the spring. From 1959 through 1970, the information now contained in the Uniform Crime Report was found in the Department of State Police's Michigan Law Enforcement Officials Report on Crime. Michigan began collecting such data in 1959.

National data on crime and comparisons with other states are found in the Federal Bureau of Investigation's Uniform Crime Report for the United States.

The Michigan Department of State Police collects data from its units in the field, county sheriff departments, and other police units of local governments. Its statistics are more comprehensive than those published in the federal Uniform Crime Report, especially since less is now being published in that document. The tables that follow present considerable information not included in this year's federal Uniform Crime Report. For additional information, the Uniform Reporting Section of the Michigan Department of State Police should be contacted.

Statistics on all types of fires are kept by the Fire Marshall Division, Michigan Department of State Police, and are published in Michigan Fire Incident Reporting System.

The Federal Bureau of Investigation divides crimes into two categories: Index Offenses and Nonindex Offenses. Index Offenses are those referred to when authorities say the crime index has increased. The crime rate is the total index crime per 100,000 population. Crimes in the index are usually more serious and/or are based on data with a high degree of interpreting and reporting reliability. Index Offenses are murder and nonnegligent manslaughter; rape; robbery in the form of stealing from a person; aggravated assault; burglary, which is any unlawful entry to commit a felony or theft; larceny, which is theft excluding motor vehicle theft (listed separately) and does not include con games, embezzlement, or fraud; and motor vehicle theft (the term has been used interchangeably with auto theft), which includes all cases in which a motor vehicle is stolen or driven away. All other offenses are classified under Nonindex Offenses. Sex offenses do not include rape or prostitution and commercialized vice, which are listed separately. Offenses against family and children include nonsupport, desertion, neglect, and abuse. The term "liquor laws" as used here includes all violations of the liquor laws except driving under the influence and drunkenness, which are listed separately.

Offenses are crimes committed; arrests refer to the number of individuals taken into custody and formally charged with violation of the law. An offense is cleared by arrest when at least one person is arrested, charged, and given to the court for prosecution. Data concerning offenses include attempts to commit a crime whether or not successfully executed. It might be noted that perhaps one-half of all crime goes unreported.

The Court System

Because of the numerous names, the court system seems confusing. There are two court systems: federal and state. The federal system will be considered first. The Federal District Court in Michigan is divided into the Eastern District, with the main court in Detroit and branches in Flint and Bay City, and the Western District, with the main court in Grand Rapids and a branch in Marquette. These courts not only handle criminal and civil cases, but also have bankruptcy courts that report separately. An appeal from a Federal District Court in Michigan goes to the 6th Circuit Court of Appeals in Cincinnati, Ohio. From there, a case would be appealed to the U.S. Supreme Court in Washington, D.C. There currently is no good source of data on federal courts in Michigan, as they issue no annual report. They must make monthly reports. Separate reports are issued for criminal, civil, and bankruptcy proceedings.

The Michigan Constitution of 1963 provided for a uniform state court system consisting of courts and several other judicial organizations with specialized functions. The courts are responsible not only for the formal processing of fully litigated criminal prosecutions and civil proceedings, but also for the administrative proceedings of criminal cases. We will consider each part of the state system in detail, beginning with the Michigan Supreme Court.

Supreme Court

The Michigan Supreme Court is the highest appellate court in the state judicial system and is responsible for exercising supervision and control over all other state courts. This supervision includes promulgation of court rules and procedures. The seven Supreme Court judges are chosen in nonpartisan elections for eight-year terms. No more than two terms of office shall expire at the same time. The chief justice is selected by the court justices from their number. The court appoints an administrator of the courts and such assistants as necessary to perform the requisite duties and aid in the administration of the courts. The Supreme Court is located in Lansing.

Court of Appeals

A decision of the Court of Appeals is final, except when the Michigan Supreme Court grants review. It hears appeals on both criminal and civil cases and from administrative agencies. The 18 Court of Appeals judges are nominated and elected in nonpartisan elections from three districts. The three courts are located in Detroit, Lansing, and Grand Rapids.

Circuit Court

Circuit courts evolved from the old system of county courts. Presently there are 50, each with a jurisdiction of one to four counties. These are courts of record and have general responsibility for criminal, civil, and divorce cases. They generally have original jurisdiction in criminal cases when the offense constitutes a felony or has a maximum penalty exceeding one year in the state prison. There are 147 judges, elected every six years on a nonpartisan ballot from their district.

Court of Claims

The Court of Claims is a special court provided for hearing cases involving claims against the state or any of its departments, commissions, or institutions. One of the circuit judges is designated by the court administrator to act as judge in the Court of Claims when it is in session. Any claimant may bring suit in this court, provided the claim is in excess of $100.

Probate Courts

In general, probate courts have original jurisdiction in all cases of juvenile delinquents and dependents. These courts handle wills and estates, the commitment of mentally ill persons, and adoptions. The juvenile division handles cases involving children under 17 years of age who are delinquent, neglected, or abandoned. Except for a few counties that have joined to form a probate district, each county has its own probate court. There are 83 of these courts and 103 judges, nominated and chosen in nonpartisan elections for six-year terms.

District Courts

The district courts were created to replace justice of the peace courts, circuit court commissioners, and most of the municipal courts except for those in some of the larger cities. The civil jurisdiction of the district courts is exclusive in cases involving up to $10,000. They have criminal jurisdiction in misdemeanor cases punishable by fine or imprisonment in the state prison not exceeding one year; ordinance and charter violations; arraignments; the fixing of bail and acceptance of bonds; and preliminary examinations in felony and high misdemeanor cases. A small claims division was created within the district courts to adjudicate on an optional and informal basis those civil matters involving up to $300. District courts do not handle divorces, injunctions, or cases that are basically equitable in nature. There are 86 district courts divided, for the most part, along county lines; however, many of the less populous counties have joined to form a district, while some of the more populous are divided into two or more districts. For example, Wayne County has eleven such courts. Some counties have divided their district courts into several divisions. There are 188 judgeships.

Municipal Courts

Most of the municipal courts were abolished when the district courts were formed, but some municipalities were permitted to elect to maintain their municipal status. There are 24 municipal courts located in Kent, Macomb, Oakland, and Wayne counties. There are 36 judgeships. These courts have exclusive jurisdiction over all ordinance violations, all of the criminal jurisdiction formerly held by justices of the peace, and civil jurisdiction in controversies in which damages not exceeding $1,000 are sought. In some instances, the sum is $1,500. Detroit has a special municipal court system, all described under the next two subheadings.

Common Pleas Court

The municipal court that handles civil cases in Detroit is the Common Pleas Court. It is a consolidation of the various justice of the peace courts, and its jurisdiction in civil cases is greater than these former courts once held. There are a civil division and a landlord-tenant division. There are 13 judgeships.

Recorder's Court

The municipal court in Detroit that has jurisdiction over criminal cases is the Recorder's Court. It also has a traffic and ordinance division. The Recorder's Court has a total of 23 judgeships, three in the Traffic and Ordinance Division.

Judicial Tenure Commission

The Judicial Tenure Commission is responsible for investigating complaints against judges and, where appropriate, recommending that the state Supreme Court take certain action. Recommendations must be based upon proof of conviction of a felony, physical or mental disability that prevents the performance of judicial duties, habitual intemperance, or conduct clearly prejudicial to the administration of justice. The commission consists of nine members selected for staggered three-year terms. Four are judges elected by their colleagues in the courts in which they serve: one from the Court of Appeals, one from the circuit courts, one from the probate courts, and one from a court of limited jurisdiction. Three are members of the state bar; one of these shall be a judge and the other two shall not be. Two members are appointed by the governor and cannot be judges or members of the state bar.

State Bar Grievance Board

The State Bar Grievance Board was established by the state Supreme Court to supervise and discipline members of the Michigan bar. The board consists of seven members: three lawyers appointed by the commissioners of the state bar, and two lawyers and two laymen appointed by the Supreme Court. All members of the board serve three-year terms without compensation; only full-time employees of the board are compensated. No public funds are provided for the board's operation, and all reasonable and necessary expenses are paid by the state bar out of members' annual dues.

State Appellate Defender

The Office of the State Appellate Defender provides indigents in criminal postconviction cases with competent legal representation consistent with constitutional requirements. Appointments are made by a court from a staff of attorneys to handle a case until completion. The attorneys examine the lower court documents, research issues, make motions and oral arguments, and write briefs. Law students have been employed to research cases so that the attorneys' time can be used most efficiently. The State Appellate Defender's office provides information to legislators on pending legislation and cases in areas of criminal law and publishes a criminal defense newsletter on significant recent cases in Michigan and federal courts.

Probation Services

Probation services are supervised by the courts, although probation officers are provided by the Department of Corrections and by some counties and cities. Services include presentence investigations, monitoring and supervising convicted offenders placed on probation, and supervising misdemeanants who do not require incarceration.

Corrections

There is one federal prison in Michigan, located in Milan. It was constructed in 1933 to house marshals' prisoners, but it presently also is being used as a correctional facility for young adults. A prison industry produces metal furniture for federal government use. Milan is organized into five functional units: marriage counseling, marshals' prisoners, general treatment, drug abuse, and admission and orientation. A new federal prison is planned for Detroit, across from the present courthouse, to hold people awaiting trial and for relatively short periods of time. For additional information, the Case Management Coordinator at Milan should be contacted.

Information on Michigan prisons and jails comes from the Michigan Department of Corrections. Data on state prisons and the people confined to them are found in the department's Annual Report, the title of which has changed several times in the last years. The Michigan Department of Corrections also publishes special reports, Monthly Summary and Facilities and Census Report, which are useful and current. Information on county jails may be obtained from special releases of the Office of Jail Services, Department of Corrections. Information on city jails is not available except for several cities that currently send data to the Office of Jail Services. It is expected that more information on local jails will become available in the future.

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VIII. LAW ENFORCEMENT AND THE COURTS

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TABLE VIII-1. CRIMINAL OFFENSES IN MICHIGAN BY TYPE IN THE CRIME INDEX: 1960-1980

Year	Murder and nonnegligent manslaughter	Rape	Robbery	Aggravated assault	Burglary	Larceny and theft	Motor vehicle theft	Total crime index
1960	366	894	5,590	7,209	42,723	106,540	13,171	176,493
1961	297	883	4,776	7,576	43,496	112,209	13,442	182,679
1962	255	939	5,766	7,824	43,408	116,279	14,725	189,196
1963	242	940	6,301	7,370	44,086	125,573	17,014	201,526
1964	250	1,217	6,766	8,650	45,871	129,791	21,172	213,717
1965	344	1,407	7,881	10,341	55,017	133,516	24,208	232,714
1966	365	1,844	12,423	10,641	72,333	153,895	27,612	279,113
1967	517	1,848	16,071	12,826	91,264	173,095	33,415	329,036
1968	614	2,105	17,608	13,802	88,234	167,783	34,732	324,878
1969	726	2,231	22,880	15,080	104,177	201,466	41,594	388,154
1970	831	2,402	30,758	17,099	139,398	253,258	41,184	484,930
1971	938	2,405	29,698	18,647	151,357	264,980	44,720	512,745
1972	964	2,652	26,248	20,440	143,034	248,201	42,890	484,429
1973	1,163	3,166	25,521	23,001	142,304	247,785	49,234	492,092
1974	1,170	3,370	30,657	24,739	172,828	302,301	56,599	591,664
1975	1,042	3,477	32,354	25,751	173,134	327,367	59,755	622,880
1976	1,001	3,281	30,241	24,154	151,207	321,192	55,688	586,764
1977	905	3,565	23,840	25,149	135,568	281,548	49,394	519,917
1978	862	3,614	20,192	28,661	130,716	279,261	47,995	511,301
1979	810	4,085	20,168	31,261	138,074	312,643	55,142	562,183
1980	941	4,267	22,363	30,760	158,944	337,609	53,562	608,446

SOURCE: Michigan Department of State Police, Uniform Crime Report, 1971 through 1980 (East Lansing: annually), pp. 9-24; Michigan Law Enforcement Officials Report on Crime, 1968 through 1970 (East Lansing: annually), and special release.

TABLE VIII-2. INDEX OF CRIMINAL OFFENSES PER 100,000 INHABITANTS IN MICHIGAN: 1960-1980

Year	Murder and nonnegligent manslaughter	Rape	Robbery	Aggravated assault	Burglary	Larceny and theft	Motor vehicle theft	Total crime index
1960	4.7	11.4	71.4	92.0	545.4	1,360.0	168.1	2,252.9
1961	3.8	11.2	60.5	96.0	551.1	1,421.6	170.3	2,314.4
1962	3.2	11.8	72.7	98.6	547.2	1,465.8	185.6	2,384.9
1963	3.0	11.7	78.2	91.5	547.1	1,558.4	211.1	2,500.9
1964	3.1	14.9	82.6	105.7	560.3	1,585.3	258.6	2,610.4
1965	4.1	16.8	94.3	123.7	658.3	1,597.7	289.7	2,784.7
1966	4.3	21.7	145.0	125.0	849.8	1,808.0	324.4	3,279.0
1967	6.0	21.4	186.2	148.6	1,057.5	2,005.7	387.2	3,812.7
1968	7.1	24.2	202.5	158.7	1,014.7	1,929.4	399.4	3,736.0
1969	8.3	25.4	260.6	171.7	1,186.4	2,294.3	473.7	4,420.4
1970	9.3	27.0	345.6	192.7	1,566.1	2,845.3	462.7	5,448.0
1971	10.4	26.7	330.1	207.3	1,682.5	2,945.5	497.1	5,699.7
1972	10.7	29.4	291.2	226.3	1,587.0	2,753.8	475.9	5,374.8
1973	11.9	34.9	281.7	253.9	1,570.5	2,734.6	543.4	5,430.9
1974	12.8	37.0	336.3	271.4	1,895.7	3,315.8	620.8	6,489.7
1975	11.4	38.0	353.3	281.2	1,890.7	3,575.1	652.6	6,802.2
1976	11.2	36.0	332.2	265.3	1,660.9	3,528.0	611.7	6,445.1
1977	9.3	38.7	261.1	272.0	1,514.9	3,126.7	542.7	5,765.4
1978	9.9	39.3	219.7	311.9	1,422.5	3,039.1	522.3	5,564.3
1979	8.8	44.4	219.1	339.5	1,499.7	3,395.7	598.9	6,106.0
1980	10.2	46.2	242.1	332.9	1,720.4	3,654.3	579.8	6,585.9

SOURCE: Michigan Department of State Police, Uniform Crime Report, 1971 through 1980 (East Lansing: annually), pp. 9-24; and Michigan Law Enforcement Officials Report on Crime, 1960 through 1970 (East Lansing: annually), and special release.

NOTE: Michigan population of 9,238,634 is Bureau of the Census provisional estimate as of 1 July 1980.

TABLE VIII-3. INDEX OF CRIMINAL OFFENSES PER 100,000 INHABITANTS IN THE UNITED STATES: 1960-1980

Year	Murder and nonnegligent manslaughter	Forcible rape	Robbery	Aggravated assault	Burglary	Larceny and theft	Motor vehicle theft	Total crime index
1960	5.1	9.5	60.0	85.4	505.6	1,027.8	182.4	1,875.8
1961	4.7	9.4	58.1	85.0	515.7	1,038.5	183.0	1,894.5
1962	4.6	9.4	59.5	87.9	532.0	1,117.4	196.8	2,007.6
1963	4.6	9.3	61.6	91.7	572.9	1,211.0	215.9	2,167.0
1964	4.9	11.2	68.0	105.4	630.9	1,306.8	246.5	2,373.7
1965	5.1	12.1	71.5	110.4	658.7	1,320.5	255.9	2,434.2
1966	5.6	13.2	80.6	119.4	716.6	1,433.4	286.0	2,654.7
1967	6.2	13.9	102.5	129.2	821.5	1,565.4	333.0	2,971.8
1968	6.9	15.8	131.5	142.7	926.6	1,735.1	391.7	3,350.2
1969	7.3	18.4	148.0	153.3	978.2	1,918.2	434.8	3,658.1
1970	7.8	18.6	171.7	163.6	1,078.4	2,065.5	455.3	3,960.9
1971	8.6	20.4	187.5	177.5	1,156.4	2,131.3	458.3	4,140.0
1972	8.9	22.4	180.3	187.3	1,133.9	1,980.4	424.6	3,937.8
1973	9.3	24.4	182.6	198.9	1,215.1	2,058.2	441.1	4,129.7
1974	9.7	26.1	208.8	214.2	1,429.0	2,473.0	460.6	4,821.4
1975	9.6	26.3	218.2	227.4	1,525.9	2,804.8	469.4	5,281.7
1976	8.7	26.4	195.8	228.7	1,439.5	2,921.4	446.1	6,255.6
1977	8.8	29.1	187.1	241.5	1,410.9	2,729.9	447.6	5,055.1
1978	9.0	30.8	191.3	255.9	1,423.7	2,743.9	454.7	5,109.3
1979	9.6	34.0	212.5	273.6	1,469.7	2,934.6	492.4	5,426.5
1980	10.3	36.8	250.4	292.5	1,674.9	3,174.1	500.9	5,939.9

SOURCE: Federal Bureau of Investigation, Uniform Crime Reports for the United States, 1978 and 1981 (Washington, D.C.: 1978) Table 1 and Table 10.

NOTE: Population is the Bureau of Census provisional estimates as of 1 July, except 1 April 1970 census. The 1977 population estimate was 216,332,000, and the 1980 population estimate was 215,162,695.

TABLE VIII-4. NON-INDEX CRIME OFFENSES IN MICHIGAN, BY TYPE: 1974-1980

Offenses	1974	1975	1976	1977	1978	1979	1980
Negligent manslaughter	233	211	197	331	190	n.a.	n.a.
Assault (nonaggravated)	41,371	44,605	43,810	46,126	53,029	58,478	59,648
Arson	4,821	5,499	5,412	5,641	5,728	7,745[a]	7,077
Forgery and counterfeiting	10,780	9,947	8,392	6,348	5,797	n.a.	n.a.
Fraud	18,800	21,007	23,147	28,455	33,054	n.a.	n.a.
Embezzlement	2,406	2,682	2,858	7,965	1,512	n.a.	n.a.
Stolen property	5,285	5,429	4,933	5,717	6,943	n.a.	n.a.
Vandalism	122,889	137,080	135,014	149,419	167,043	n.a.	n.a.
Weapons (possession, etc.)	12,018	12,167	10,918	9,895	7,004	7,192	6,952
Prostitution	680	720	958	928	1,011	n.a.	n.a.
Sex offenses (except rape and prostitution)	7,791	8,045	7,657	8,710	8,069	n.a	n.a.
Narcotic laws	29,102	26,891	25,483	24,198	23,094	n.a.	n.a.
Gambling	474	502	315	308	320	n.a.	n.a.
Against family and children	12,716	13,489	12,047	10,113	68,865	n.a.	n.a.
Driving under the influence	31,500	33,440	30,988	31,982	36,776	45,076	47,661
Liquor laws	13,304	16,208	17,265	17,969	18,497	n.a.	n.a.
Drunkenness	30,663	32,409	30,396	29,4[illegible]8	4,362	n.a.	n.a.
Disorderly conduct	40,194	49,155	43,895	53,526	73,860	n.a.	n.a.
Vagrancy	1,020	5,664	1,360	714	904	n.a.	n.a.
Other	140,898	143,508	132,714	108,822	57,411	514,861	513,385
TOTAL	526,945	568,658	537,759	546,424	573,469	633,352	634,723

SOURCE: Michigan Department of State Police, Uniform Crime Report, 1973 through 1980 (East Lansing: annually), and special release.

a. 1979 arson figures are adjusted.

TABLE VIII-5. NON-INDEX CRIME OFFENSES BY TYPE, PER 100,000 INHABITANTS IN MICHIGAN: 1974-1980

Offenses	1974	1975	1976	1977	1978	1979	1980
Negligent manslaughter	2.6	2.3	2.2	3.6	2.1	n.a.	n.a.
Assault (nonaggravated)	453.8	487.1	481.2	505.3	578.0	635.1	645.6
Arson	52.9	60.1	59.4	61.8	62.4	96.7	76.6
Forgery and counterfeiting	118.2	108.6	92.2	69.5	63.2	n.a.	n.a.
Fraud	206.2	229.4	254.3	311.7	360.3	n.a.	n.a.
Embezzlement	26.4	29.3	31.4	87.2	16.5	n.a.	n.a.
Stolen property	58.0	59.3	54.2	62.6	75.7	n.a.	n.a.
Vandalism	1,347.9	1,497.0	1,483.0	1,636.8	1,820.6	n.a.	n.a.
Weapons (possession, etc.)	131.8	132.9	119.9	108.4	76.3	78.1	75.2
Prostitution	7.5	7.9	10.5	10.2	11.0	n.a.	n.a.
Sex offenses (except rape and prostitution)	85.5	87.9	84.1	95.4	87.9	n.a.	n.a.
Narcotic laws	319.2	293.7	279.9	265.1	251.7	n.a.	n.a.
Gambling	5.2	5.5	3.5	3.4	3.5	n.a.	n.a.
Against family and children	139.5	147.3	132.3	110.8	750.6	n.a.	n.a.
Driving under the influence	345.5	365.2	340.4	350.3	400.8	489.6	515.9
Liquor laws	145.9	177.0	189.6	196.8	201.6	n.a.	n.a.
Drunkenness	336.3	353.9	333.9	322.8	47.5	n.a.	n.a.
Disorderly conduct	440.9	536.8	482.2	586.3	805.0	n.a.	n.a.
Vagrancy	11.2	61.9	14.9	7.8	9.9	n.a.	n.a.
Other	1,545.4	1,567.2	1,457.8	1,192.0	625.3	n.a.	5,556.9
TOTAL	5,779.8	6,210.1	5,906.8	5,985.6	6,245.9	6,879.0	6,870.3

SOURCE: Michigan Department of State Police, Uniform Crime Report, 1974 through 1980 (East Lansing: annually), and special release.

NOTE: Michigan population of 9,238,634 is Bureau of the Census provisional estimate as of 1 July 1980.

TABLE VIII-6. NUMBER OF CRIMINAL OFFENSES REPORTED IN MICHIGAN COUNTIES: 1978, 1979, AND 1980

		Index crimes							
County	Year	Murder and nonnegligent manslaughter	Rape	Robbery	Aggravated assault	Burglary	Larceny	Motor vehicle theft	Total nonindex
Alcona	1978	0	3	0	9	240	163	4	257
	1979	1	0	0	12	281	237	8	331
	1980	1	0	1	15	332	309	9	340
Alger	1978	0	2	2	22	116	152	33	570
	1979	0	2	0	22	98	166	22	540
	1980	0	0	4	14	126	193	15	572
Allegan	1978	1	24	36	100	635	1,105	117	3,383
	1979	2	23	40	132	785	1,519	158	5,074
	1980	2	22	38	113	852	1,568	146	4,967
Alpena	1978	1	3	5	36	288	726	23	1,312
	1979	0	9	8	32	312	740	61	1,363
	1980	0	8	5	41	264	860	40	1,312
Antrim	1978	0	0	7	21	218	275	16	775
	1979	2	2	3	19	249	353	23	763
	1980	0	4	0	13	310	385	20	860
Arenac	1978	0	3	6	25	205	212	24	585
	1979	0	3	4	26	188	264	22	597
	1980	0	1	3	19	208	323	27	623
Baraga	1978	1	1	0	9	91	117	16	419
	1979	0	2	2	9	97	154	28	528
	1980	0	0	5	21	81	91	12	460
Barry	1978	3	6	9	75	469	864	72	3,314
	1979	0	8	8	69	383	906	47	2,673
	1980	0	10	22	93	515	1,055	56	2,857
Bay	1978	8	32	93	408	1,279	3,710	227	8,204
	1979	8	43	92	446	1,411	4,248	303	9,349
	1980	1	39	59	254	1,355	4,489	220	8,700
Benzie	1978	0	9	4	31	175	393	13	775
	1979	0	4	2	35	129	338	24	925
	1980	0	6	5	24	237	492	34	1,323
Berrien	1978	10	70	199	742	3,281	7,601	558	18,051
	1979	10	102	267	898	3,545	8,582	662	20,340
	1980	10	102	316	835	3,645	8,958	547	20,787

TABLE VIII-6. NUMBER OF CRIMINAL OFFENSES REPORTED IN MICHIGAN COUNTIES: 1978 AND 1980 (cont.)

County	Year	Index crimes: Murder and nonnegligent manslaughter	Rape	Robbery	Aggravated assault	Burglary	Larceny	Motor vehicle theft	Total nonindex
Branch	1978	0	6	5	51	243	634	44	1,609
	1979	0	2	13	27	333	1,074	86	2,339
	1980	0	6	12	54	323	1,277	49	2,346
Calhoun	1978	5	51	152	378	1,982	4,443	250	8,536
	1979	7	58	215	459	1,980	4,730	325	9,132
	1980	13	53	226	463	2,267	5,165	302	10,080
Cass	1978	2	9	16	181	622	1,106	119	3,193
	1979	3	15	24	167	691	1,419	92	3,559
	1980	5	20	16	162	698	1,557	95	3,443
Charlevoix	1978	0	4	1	27	201	492	32	770
	1979	0	4	8	21	190	464	38	1,061
	1980	0	9	3	31	366	746	42	1,311
Cheboygan	1978	0	1	1	23	281	326	26	1,192
	1979	0	2	7	28	268	561	44	1,591
	1980	0	3	2	40	400	621	40	1,622
Chippewa	1978	0	3	3	30	460	904	113	2,973
	1979	2	3	6	38	376	940	87	2,556
	1980	1	5	19	51	395	1,102	94	2,497
Clare	1978	0	10	10	39	872	1,016	54	2,473
	1979	3	7	10	46	805	1,051	52	2,718
	1980	0	13	7	46	744	1,134	42	2,674
Clinton	1978	0	13	9	49	292	749	51	1,861
	1979	0	8	9	61	346	837	63	1,881
	1980	1	10	16	49	269	920	55	1,750
Crawford	1978	1	4	8	25	346	290	33	1,047
	1979	0	4	4	18	429	279	20	931
	1980	0	4	2	14	362	398	22	924
Delta	1978	2	4	6	47	379	832	57	1,747
	1979	2	6	5	67	372	914	59	2,221
	1980	1	3	3	46	402	975	51	1,815
Dickinson	1978	2	3	2	16	193	467	39	1,006
	1979	1	0	4	17	164	465	51	1,291
	1980	0	3	3	14	163	480	31	1,094

TABLE VIII-6. NUMBER OF CRIMINAL OFFENSES REPORTED IN MICHIGAN COUNTIES: 1978 AND 1980 (cont.)

County	Year	Index crimes							Total nonindex
		Murder and nonnegligent manslaughter	Rape	Robbery	Aggravated assault	Burglary	Larceny	Motor vehicle theft	
Eaton	1978	0	21	31	92	478	1,894	93	3,246
	1979	3	15	37	94	430	1,955	164	3,215
	1980	5	33	58	64	567	2,193	148	3,262
Emmet	1978	1	4	8	22	248	701	64	1,671
	1979	0	6	5	23	257	659	75	1,631
	1980	1	8	8	40	283	672	45	3,152
Genesee	1978	48	185	896	2,828	7,522	17,877	1,839	23,069
	1979	47	261	934	3,096	7,937	20,375	2,009	26,972
	1980	45	264	991	2,814	10,074	21,153	1,778	25,711
Gladwin	1978	1	7	4	25	387	359	30	815
	1979	0	7	4	29	394	493	29	1,186
	1980	0	4	6	19	415	519	27	1,240
Gogebic	1978	1	6	6	17	129	403	46	1,477
	1979	0	2	10	18	184	489	91	1,609
	1980	0	5	9	20	170	417	72	1,696
Grand Traverse	1978	1	11	8	65	450	1,480	102	2,619
	1979	2	8	27	86	538	1,933	163	3,764
	1980	0	14	24	64	726	2,116	139	4,290
Gratiot	1978	0	11	7	39	302	647	35	2,059
	1979	0	3	11	37	325	723	43	2,209
	1980	0	9	19	44	343	894	47	2,021
Hillsdale	1978	0	8	14	87	360	792	50	2,551
	1979	1	20	18	69	528	1,046	64	3,062
	1980	3	9	32	62	651	1,159	63	3,602
Houghton	1978	0	7	7	49	225	528	42	2,412
	1979	2	6	6	40	199	546	46	1,761
	1980	0	7	4	49	182	547	33	1,243
Huron	1978	1	3	4	39	224	566	44	2,977
	1979	0	10	3	35	252	688	46	3,395
	1980	0	10	5	39	424	812	52	3,359
Ingham	1978	11	105	203	642	3,581	9,735	694	15,351
	1979	11	97	236	659	3,381	10,870	808	18,313
	1980	7	100	295	708	4,305	12,570	707	19,358

TABLE VIII-6. NUMBER OF CRIMINAL OFFENSES REPORTED IN MICHIGAN COUNTIES: 1978 AND 1980 (cont.)

County	Year	Index crimes							Total nonindex
		Murder and nonnegligent manslaughter	Rape	Robbery	Aggravated assault	Burglary	Larceny	Motor vehicle theft	
Ionia	1978	1	9	13	91	367	940	65	2,607
	1979	0	10	22	70	483	1,342	93	3,021
	1980	3	13	27	120	491	1,374	84	3,285
Iosco	1978	1	8	3	60	474	650	32	1,656
	1979	1	1	3	57	467	817	58	2,025
	1980	1	12	6	60	481	965	50	1,974
Iron	1978	0	2	1	13	107	196	10	507
	1979	0	0	1	24	124	205	17	545
	1980	0	1	3	21	153	195	12	589
Isabella	1978	1	16	7	49	461	1,446	60	3,658
	1979	0	3	13	50	413	1,816	73	4,421
	1980	1	11	14	43	467	1,973	73	4,446
Jackson	1978	11	44	122	605	2,190	4,719	392	11,269
	1979	12	75	123	755	2,521	5,277	394	12,586
	1980	8	54	121	708	2,271	5,275	341	13,145
Kalamazoo	1978	10	47	258	909	3,169	8,778	524	14,330
	1979	7	104	365	1,105	3,601	9,985	662	15,192
	1980	6	68	181	619	2,478	7,366	363	10,200
Kalkaska	1978	1	7	2	29	249	241	28	1,035
	1979	0	5	1	41	284	293	34	1,288
	1980	0	6	3	25	329	446	26	1,282
Kent	1978	14	184	487	991	5,705	12,652	1,070	26,953
	1979	18	230	671	1,131	6,445	15,228	1,264	31,218
	1980	33	275	650	1,365	6,947	17,488	1,152	33,684
Keweenaw	1978	0	1	0	7	51	43	4	119
	1979	0	0	1	1	35	26	4	100
	1980	0	1	0	2	30	24	2	72
Lake	1978	3	8	11	27	638	261	16	582
	1979	0	2	5	23	492	276	22	582
	1980	0	3	4	23	459	318	9	536
Lapeer	1978	0	29	18	69	436	1,234	92	3,495
	1979	2	21	21	67	504	1,461	125	3,766
	1980	0	21	17	62	574	1,590	133	3,726

TABLE VIII-6. NUMBER OF CRIMINAL OFFENSES REPORTED IN MICHIGAN COUNTIES: 1978 AND 1980 (cont.)

County	Year	Index crimes: Murder and nonnegligent manslaughter	Rape	Robbery	Aggravated assault	Burglary	Larceny	Motor vehicle theft	Total nonindex
Leelanau	1978	0	2	1	8	68	173	9	607
	1979	0	3	2	5	72	209	24	813
	1980	0	3	4	13	119	236	11	963
Lenawee	1978	0	25	41	177	816	2,292	141	7,893
	1979	4	30	49	158	849	2,745	150	6,145
	1980	2	24	31	141	791	2,678	149	5,613
Livingston	1978	4	17	36	188	887	2,104	251	6,980
	1979	2	27	38	173	1,006	2,560	275	7,612
	1980	3	40	35	219	1,155	2,832	282	7,709
Luce	1978	0	3	0	12	118	146	21	719
	1979	0	2	3	13	94	195	17	739
	1980	0	1	1	17	140	208	22	844
Mackinac	1978	0	4	4	31	233	313	23	1,102
	1979	0	1	8	24	224	498	10	1,162
	1980	0	3	5	27	246	655	18	1,174
Macomb	1978	26	110	498	1,466	6,221	21,532	3,085	51,248
	1979	26	161	568	1,649	6,689	25,004	4,246	60,369
	1980	26	176	612	1,690	8,179	27,862	4,443	58,806
Manistee	1978	0	5	10	49	360	442	34	1,204
	1979	1	6	6	43	391	643	54	1,260
	1980	1	8	6	33	429	600	40	1,297
Marquette	1978	1	15	9	114	483	1,853	142	5,088
	1979	0	14	12	100	544	2,075	141	5,882
	1980	0	19	15	135	617	2,338	129	7,250
Mason	1978	0	5	6	20	232	850	27	2,418
	1979	1	8	8	27	267	780	57	2,314
	1980	0	18	8	29	305	1,008	64	2,755
Mecosta	1978	0	4	7	27	249	1,080	50	2,675
	1979	0	11	18	48	396	1,291	71	3,026
	1980	3	6	20	43	447	1,482	61	3,088
Menominee	1978	1	9	6	23	292	467	37	1,206
	1979	1	2	1	30	296	503	36	1,216
	1980	1	4	5	37	319	539	36	1,476

TABLE VIII-6. NUMBER OF CRIMINAL OFFENSES REPORTED IN MICHIGAN COUNTIES: 1978 AND 1980 (cont.)

		Index crimes							
County	Year	Murder and nonnegligent manslaughter	Rape	Robbery	Aggravated assault	Burglary	Larceny	Motor vehicle theft	Total nonindex
Midland	1978	1	11	45	56	823	1,932	109	4,741
	1979	0	23	108	89	1,054	2,396	155	5,347
	1980	0	15	121	76	1,249	2,635	134	5,466
Missaukee	1978	1	1	0	5	165	130	6	308
	1979	0	2	2	3	133	133	14	236
	1980	0	1	2	3	134	160	12	218
Monroe	1978	14	32	63	199	1,112	2,558	407	7,537
	1979	3	23	62	241	1,249	2,855	420	8,225
	1980	8	30	64	207	1,473	3,005	409	7,553
Montcalm	1978	2	21	21	33	373	480	40	1,432
	1979	0	13	36	35	449	541	59	1,564
	1980	1	23	44	57	550	878	74	1,951
Montmorency	1978	0	0	1	2	123	108	13	229
	1979	0	0	3	6	222	168	10	278
	1980	0	0	0	2	200	147	14	251
Muskegon	1978	7	51	173	700	2,272	6,313	370	10,985
	1979	10	72	223	978	2,550	7,213	367	13,495
	1980	12	93	215	951	2,951	7,880	345	13,193
Newaygo	1978	0	10	16	40	445	598	35	1,389
	1979	2	11	31	39	572	635	77	1,385
	1980	1	8	19	43	556	768	56	1,346
Oakland	1978	40	300	1,363	2,590	12,848	32,997	4,984	74,630
	1979	46	266	1,268	2,777	14,247	37,318	5,464	79,375
	1980	32	310	1,492	2,600	17,275	38,533	5,045	81,451
Oceana	1978	0	8	4	34	181	281	19	980
	1979	0	10	10	46	238	408	24	986
	1980	0	16	2	28	257	439	33	971
Ogemaw	1978	0	5	9	31	450	363	40	1,240
	1979	0	3	7	39	508	435	43	1,573
	1980	2	4	7	30	597	527	40	1,574
Ontonagon	1978	0	1	1	1	53	153	11	267
	1979	0	0	1	6	106	136	8	374
	1980	0	0	3	3	82	143	13	269

TABLE VIII-6. NUMBER OF CRIMINAL OFFENSES REPORTED IN MICHIGAN COUNTIES: 1978 AND 1980 (cont.)

		Index crimes							
County	Year	Murder and nonnegligent manslaughter	Rape	Robbery	Aggravated assault	Burglary	Larceny	Motor vehicle theft	Total nonindex
Osceola	1978	0	2	4	37	203	253	21	897
	1979	1	6	3	20	246	317	37	1,091
	1980	5	7	2	25	276	379	34	1,023
Oscoda	1978	0	3	3	13	225	175	5	424
	1979	0	3	2	12	298	170	9	369
	1980	2	0	0	14	275	289	13	630
Otsego	1978	0	4	1	24	292	418	18	1,237
	1979	0	10	2	28	300	544	38	1,582
	1980	2	6	4	19	289	520	28	1,298
Ottawa	1978	3	23	23	107	918	2,965	181	7,205
	1979	1	21	11	132	853	3,221	175	7,092
	1980	2	22	20	104	1,031	3,543	162	6,666
Presque Isle	1978	2	0	0	11	129	153	2	277
	1979	2	3	0	11	176	177	8	325
	1980	0	1	0	15	166	222	10	360
Roscommon	1978	1	7	6	45	509	584	65	2,453
	1979	0	5	7	42	526	702	86	2,550
	1980	1	6	6	35	548	831	74	1,955
Saginaw	1978	30	111	389	974	3,696	8,599	533	28,152
	1979	31	152	374	1,215	3,927	9,765	666	29,526
	1980	29	135	376	1,313	4,114	10,113	695	26,641
St. Clair	1978	3	32	81	232	1,859	4,303	324	12,759
	1979	1	43	77	197	2,002	4,873	344	13,390
	1980	2	47	58	226	2,195	5,196	330	14,274
St. Joseph	1978	1	18	28	94	480	1,295	81	4,424
	1979	3	11	16	83	478	1,395	76	4,468
	1980	4	21	17	78	473	1,457	58	4,868
Sanilac	1978	0	5	9	53	403	545	56	2,080
	1979	1	10	6	56	467	703	92	2,509
	1980	1	8	12	58	468	767	58	2,183
Schoolcraft	1978	0	3	1	18	166	193	14	603
	1979	0	3	2	17	124	173	23	659
	1980	0	7	3	19	158	218	19	588

TABLE VIII-6. NUMBER OF CRIMINAL OFFENSES REPORTED IN MICHIGAN COUNTIES: 1978 AND 1980 (cont.)

		Index crimes							
County	Year	Murder and nonngligent manslaughter	Rape	Robbery	Aggravated assault	Burglary	Larceny	Motor vehicle theft	Total nonindex
Shiawassee	1978	1	11	19	113	667	1,493	106	3,810
	1979	3	16	18	120	759	1,918	170	4,042
	1980	1	31	31	135	910	2,139	161	3,834
Tuscola	1978	1	8	8	88	404	783	96	2,616
	1979	1	17	19	94	491	927	118	2,838
	1980	2	34	8	77	497	972	86	2,863
Van Buren	1978	3	26	33	264	989	1,736	123	5,079
	1979	2	29	60	228	944	1,732	191	5,410
	1980	3	25	45	206	1,122	2,091	170	5,554
Washtenaw	1978	16	107	306	741	3,433	9,602	1,263	17,252
	1979	9	111	391	924	3,900	11,315	1,482	18,479
	1980	12	113	328	969	4,372	12,219	1,258	19,298
Wayne	1978	562	1,626	14,273	10,902	46,619	75,404	27,955	109,129
	1979	511	1,754	13,462	11,332	46,784	78,245	31,275	119,915
	1980	635	1,736	15,492	11,664	56,260	86,730	31,609	121,008
Wexford	1978	0	5	10	40	299	876	45	1,684
	1979	1	10	6	62	417	980	71	2,107
	1980	0	17	6	36	585	1,152	62	2,232
TOTAL	1978	862	3,614	20,192	28,661	130,716	279,261	47,995	573,469
	1979	810	4,085	20,168	31,261	138,074	312,643	55,142	633,352
	1980	941	4,267	22,363	30,760	158,944	337,609	53,562	634,723

SOURCE: Michigan Department of State Police, Uniform Crime Report, 1980, and special release.

TABLE VIII-7. ACTS OF ARSON IN MICHIGAN BY TYPE OF PROPERTIES INVOLVED: 1980

Type of property	Incendiary acts	Suspicious acts	Total
Public assembly	142	95	237
Educational			
College	6	2	8
High school	53	36	89
Junior high	38	15	53
Elementary	61	29	90
Other	6	4	10
Day care center	1	0	1
Hospital	36	11	47
Nursing home	5	3	8
Police station	13	0	13
Other institution	20	6	26
Residence			
1 and 2 family	1,275	789	2,064
Apartment, tenement, flat	313	238	551
Rooming, lodge, dormitory	20	12	32
Mobile and other	67	44	111
Mercantile stores	169	176	345
Office	34	29	63
Utilities	3	7	10
Industrial manufacturing	47	40	87
Barn	48	95	143
Lumberyard	3	4	7
Other storage	328	381	709
Construction	54	43	97
Forest fires	2	15	17
Other special	2,764	3,136	5,900
Subtotal fixed	5,508	5,210	10,718
Mobile-passenger and recreation	932	1,179	2,111
Other	405	651	1,056
Subtotal mobile	1,337	1,830	3,167
TOTAL	6,845	7,040	13,885

SOURCE: Michigan Department of State Police, Fire Marshal Division, special release.

TABLE VIII-8. ACTS OF ARSON IN MICHIGAN BY TYPE OF MATERIAL USED: 1980

Type of material	Incendiary acts	Suspicious acts	Total
Gas	43	26	69
Flammable or combustible liquid	1,088	444	1,532
Volatile solid	22	10	32
Chemical, metal, plastic, paint	93	107	200
Natural product	1,389	1,657	3,046
Wood, paper	2,510	2,522	5,032
Fabric, textile, fur	644	734	1,378
Treated material	39	39	78
Other or undetermined	1,017	1,501	2,518
TOTAL	6,845	7,040	13,885

SOURCE: Michigan Department of State Police, Fire Marshal Division, special release.

TABLE VIII-9. TOTAL VALUE, VALUE OF LOSS, VALUE OF INSURANCE OF PROPERTY AND CONTENTS INVOLVED IN MICHIGAN ARSONS: 1980

(In millions of dollars)

	Incendiary acts	Suspicious acts	Total
Property insurance	385,005,687	201,599,276	586,604,963
Contents insurance	77,602,560	86,766,867	164,369,427
Total insurance	462,608,247	288,366,143	750,974,390
Property value	1,000,485,553	576,576,466	1,577,062,019
Contents value	343,371,732	210,306,122	553,677,854
Total value	1,343,857,285	786,882,588	2,130,739,873
Property loss	17,566,185	18,144,379	35,710,564
Contents loss	7,333,440	8,742,308	16,075,748
Total loss	24,899,625	26,886,687	51,786,312

SOURCE: Michigan Department of State Police, Fire Marshal Division, special release.

IX. ELECTIONS AND GOVERNMENT ORGANIZATION

Statistics on governmental organization are collected on the occasion of each Census of Governments conducted by the U.S. Bureau of the Census. That census also is a source of considerable detail on government financing and employment, the subject of chapter X.

Other major sources of information regarding Michigan government organization are the biennial Michigan Manual, the Journal of the Senate, and the Journal of the House. In addition, The Book of the States presents information on all states and is a good source for comparative statistics.

Table IX-5 is the only table in the chapter which gives an indication of the Michigan legislature's output. It presents some of the scarce readily quantifiable data describing the legislature. For those interested in assessing legislative performance, the Citizens Conference on State Legislatures has developed "The Legislative Evaluation Study." This body is a national, nonprofit, nonpartisan organization whose purpose is to help state legislatures improve themselves.

On 1 June 1977 revised Michigan laws relating to campaign financing took effect. As under the old laws, the spending reports of candidates for state office will be on file with the Secretary of State. However, the responsibility for filing is shifted to the candidate (or treasurer of a committee) instead of resting with the county clerk. Reports still must be filed with the clerk of the county in which the candidate resides.

There is a spending limit of one million dollars for gubernatorial candidates who accept "qualifying contributions" (the state counterpart of federal matching funds). There no longer are spending limits for other offices.

In addition to the filing and expenditure alterations, an organizational change has been made. Each candidate must have only one "candidate committee." Candidates choosing to have more than one committee must report these as "other committees." The Secretary of State is to keep the records on file by committee name (I.D. code) only, not by the candidate supported or by office and district. This represents a significant departure from the past, when committees supporting a candidate were filed together under the appropriate district and office.

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TABLE IX-1. NUMBER OF LOCAL GOVERNMENTAL UNITS IN MICHIGAN AND THE UNITED STATES, BY TYPE: 1942, 1952, 1957, 1962, 1967, 1972, AND 1977

Type	1942	1952	1957	1962	1967	1972	1977
			Michigan				
Counties	83	83	83	83	83	83	83
Municipalities	479	489	498	509	522	532	531
Townships	1,265	1,264	1,262	1,259	1,253	1,248	1,245
Special districts	8	84	102	99	110	139	171
School districts	6,270	4,845	3,214	1,866	935	647	608
TOTAL	8,105	6,766	5,159	3,816	2,903	2,649	2,638
			United States				
Counties	3,050	3,049	3,047	3,043	3,049	3,044	3,042
Municipalities	16,220	16,778	17,167	17,997	18,048	18,517	18,856
Townships	18,919	17,202	17,214	17,144	17,105	16,991	16,822
Special districts	8,299	12,319	14,423	18,323	21,264	23,885	26,140
School districts	108,579	67,346	50,453	34,678	21,782	15,781	15,260
TOTAL	155,116	116,743	102,353	91,185	81,248	78,218	80,120

SOURCE: Bureau of the Census, Statistical Abstract of the United States, 1945 through 1975 (Washington, D.C.: annually), Table 415 (1975), and 1977 Census of Governments, Preliminary Report No. 1, Governmental Units in 1977 (Washington, D.C.: 1977), pp. 1, 6.

TABLE IX-2. COUNTY SEATS, PROSECUTING ATTORNEYS, AND CLERKS OF MICHIGAN COUNTIES: 1981-1982

County	Seat	Prosecuting Attorney	Clerk
Alcona	Harrisville	Eugene Malanyn, (R)	Anne C. Moore, (R)
Alger	Munising	William A. Werner, (D)	Donald W. Kinnunen, (D)
Allegan	Allegan	Fred R. Hunter, III, (R)	Russell Sill, (R)
Alpena	Alpena	Theodore O. Johnson, (D)	Clara H. Noack, (R)
Antrim	Bellaire	James G. Young, (R)	Laura Sexton, (R)
Arenac	Standish	Jack W. Scully, (R)	Douglas C. Black, (R)
Baraga	L'Anse	F. Hubert Mather, (D)	Bernard J. Lambert, (D)
Barry	Hastings	Judy Hughes, (R)	Norval E. Thaler, (R)
Bay	Bay City	George Mullison, (D)	Steven Toth, (D)
Benzie	Beulah	O. Paul Schendel, (R)	Jean Bowers, (R)
Berrien	St. Joseph	John A. Smietanka, (R)	Forrest H. Kesterke, (R)
Branch	Coldwater	John L. Livesay, (R)	Raymond H. Ehl, (R)
Calhoun	Marshall	Conrad J. Sindt, (R)	Marcus J. Gray, (D)
Cass	Cassopolis	William T. Grimmer, (R)	Kenneth M. Poe, (R)
Charlevoix	Charlevoix	Scott T. Beatty, (R)	Jane E. Bannon, (R)
Cheboygan	Cheboygan	Michael J. Hackett, (R)	Joanne C. Spray, (D)
Chippewa	Sault Ste. Marie	Patrick Shannon, (D)	John Sherry, (D)
Clare	Harrison	Thomas McLaughlin, (D)	Donna Carr, (R)
Clinton	St. Johns	Jon W. Newman, (R)	Jane Swanchara, (R)
Crawford	Grayling	John B. Huss, (R)	Leo E. Lovely, (R)
Delta	Escanaba	Steven Pence, (D)	Michael R. Albert, (D)
Dickinson	Iron Mt.	Robert G. Foster, (R)	Sue Wicklund, (R)
Eaton	Charlotte	Paul F. Berger, (R)	Linda M. Twitchell, (R)
Emmet	Petoskey	John F. Salan, (R)	Irene D. Granger, (R)
Genesee	Flint	Robert F. Weiss, (D)	Michael J. Carr, (D)

TABLE IX-2. COUNTY SEATS, PROSECUTING ATTORNEYS, AND CLERKS OF MICHIGAN COUNTIES: 1981-1982 (cont.)

County	Seat	Prosecuting Attorney	Clerk
Gladwin	Gladwin	Douglas Jacobson, (D)	William H. Hall, (R)
Gogebic	Bessemer	Anders B. Tingstad, Jr., (D)	Melvin R. Peterson, (D)
Grand Traverse	Traverse City	John D. Foresman, (R)	Virginia A. Watson, (R)
Gratiot	Ithaca	Mark A. Gates, (R)	Eva M. Smith, (R)
Hillsdale	Hillsdale	Michael R. Smith, (R)	Doris June Pish, (R)
Houghton	Houghton	Richard S. Murray, (D)	Raymond J. Hosking, (D)
Huron	Bad Axe	Karl Kraus, (R)	Helen M. Lemanski, (R)
Ingham	Mason	Peter Houk (D)	Lingg Brewer, (D)
Ionia	Ionia	Randy H. Smith, (R)	Phyllis Brown Laviolette, (R)
Iosco	Tawas City	Stephen H. Naegele, (R)	D. Keith Papas, (R)
Iron	Crystal Falls	Paul Schultz, (R)	Klaryce Bilski, (D)
Isabella	Mt. Pleasant	Joseph Barberi, (R)	Betty Prout, (R)
Jackson	Jackson	Edward J. Grant, (R)	Jean S. Kahn, (R)
Kalamazoo	Kalamazoo	James J. Gregart, (R)	Phillip Hassing, (R)
Kalkaska	Kalkaska	Philip J. Crowley, (D)	Patricia Rodgers, (R)
Kent	Grand Rapids	David H. Sawyer, (R)	Maurice J. DeJonge, (R)
Keweenaw	Eagle River	Paul Tomasi, (D)	Ethel Ketola, (R)
Lake	Baldwin	D. David Hill, (R)	Lucinda K. Keefer, (R)
Lapeer	Lapeer	Earl H. Morgan, Jr., (R)	Mary Ellen Thick, (R)
Leelanau	Leland	Joseph E. Deegan, (R)	Dorothy L. Wunderlich, (R)
Lenawee	Adrian	Harvey A. Koselka, (R)	Patricia J. Johnston, (R)
Livingston	Howell	Frank R. Del Vero, (R)	Joseph H. Ellis (R)
Luce	Newberry	James P. Hoy, (R)	Eva C. Danielson, (R)
Mackinac	St. Ignace	Prentiss M. Brown, (D)	Arthur A. Kaminsky, (R)
Macomb	Mt. Clemens	George N. Parris, (D)	Edna Miller, (D)

TABLE IX-2. COUNTY SEATS, PROSECUTING ATTORNEYS, AND CLERKS OF MICHIGAN COUNTIES: 1981-1982 (cont.)

County	Seat	Prosecuting Attorney	Clerk
Manistee	Manistee	Brent Danielson, (R)	Emily Iverson, (R)
Marquette	Marquette	Gary L. Walker, (D)	Henry A. Skewis, (D)
Mason	Ludington	Martin M. Holmes, (D)	Ivan J. Anthony, (R)
Mecosta	Big Rapids	Charles B. Woodruff, (R)	Elda H. Wells, (R)
Menominee	Menominee	Jeffrey R. Jurmu, (R)	Kenneth C. Krause, (D)
Midland	Midland	Gerald L. White, (D)	Jeffrey P. Porter, (R)
Missaukee	Lake City	Gary C. Hoffman, (R)	Don Molitor, (R)
Monroe	Monroe	Michael W. LaBeau, (D)	Warren J. LaBeau, (D)
Montcalm	Stanton	Bruce Basom, (R)	Nyle B. Erskin, (R)
Montmorency	Atlanta	James E. McCormick (D)	M. Jeanne Clement, (R)
Muskegon	Muskegon	Gerald Warner, (D)	Margaret H. Greenwood, (R)
Newaygo	White Cloud	Keith Schuiteman, (R)	Maxwell L. Jordan, (R)
Oakland	Pontiac	L. Brooks Patterson, (R)	Lynn D. Allen, (R)
Oceana	Hart	Anthony Monton, (R)	Elizabeth A. Field, (R)
Ogemaw	West Branch	Lynn B. Dunbar, (D)	Edwin D. Ostrander, (R)
Ontonagon	Ontonagon	Roy D. Gotham, (D)	Bernice M. Huotari, (D)
Osceola	Reed City	James L. Talaske, (R)	Carl L. Wyman, (R)
Oscoda	Mio	Barry L. Shantz, (R)	Jonathan Kurtz, (D)
Otsego	Gaylord	James C. Cotant, (R)	Ardis M. Heacock, (R)
Ottawa	Grand Haven	Wesley J. Nykamp, (R)	Daniel C. Kreuger, (R)
Presque Isle	Rodgers City	Donald J. McLennan, (R)	Ruth M. Doyle, (D)
Roscommon	Roscommon	Thomas A. Swanson, (R)	Robert W. Smith, (R)
Saginaw	Saginaw	Robert L. Kaczmarek, (R)	Gladys June Ormsby, (D)
St. Clair	Port Huron	Robert Cleland, (R)	Marion Sargent, (R)
St. Joseph	Centreville	James Noecker, (R)	Beverly J. Burnham, (R)

TABLE IX-3. MICHIGAN REPRESENTATION IN THE 95TH CONGRESS, BY DISTRICT: 1981-1982

District	Representative	Party	District	Representative	Party
1	John Conyers, Jr.	(D)	11	Robert W. Davis	(R)
2	Carl D. Pursell	(R)	12	David E. Bonior	(D)
3	Howard Wolpe	(D)	13	George W. Crockett, Jr.	(D)
4	David A. Stockman	(R)	14	Dennis M. Hertel	(D)
5	Harold S. Sawyer	(R)	15	William D. Ford	(D)
6	James Dunn	(R)	16	John A. Dingell	(D)
7	Dale E. Kildee	(D)	17	William M. Brodhead	(D)
8	Bob Traxler	(D)	18	James J. Blanchard	(D)
9	Guy A. Vander Jagt	(R)	19	William S. Broomfield	(R)
10	Don Albosta	(D)			

SOURCE: Michigan Department of Management and Budget, special release.

(R): Republican

(D): Democrat

TABLE IX-4. MICHIGAN REPRESENTATION IN THE STATE HOUSE OF REPRESENTATIVES, BY DISTRICT: 1981-1982

District	Representative	Party	District	Representative	Party
1	Michael J. Bennane	(D)	25	Dennis M. Dutko	(D)
2	Burton Leland	(D)	26	Kirby Holmes	(R)
3	Casmer P. Ogonowski	(D)	27	Jeffrey D. Padden	(D)
4	George Cushingberry, Jr.	(D)	28	Thomas J. Anderson	(D)
5	Teola P. Hunter	(D)	29	Alfred A. Sheridan	(D)
6	Morris W. Hood, Jr.	(D)	30	Joyce Symons	(D)
7	Raymond W. Hood	(D)	31	Lucille H. McCollough	(D)
8	Daisy Elliott	(D)	32	Richard A. Young	(D)
9	Ethel Terrell	(D)	33	William R. Keith	(D)
10	Virgil C. Smith, Jr.	(D)	34	John Bennett	(D)
11	Thaddeus C. Stopczynski	(D)	35	Jack Edwin Kirksey	(R)
12	Curtis Hertel	(D)	36	Sylvia M. Skrel	(R)
13	William R. Bryant, Jr.	(R)	37	Thomas H. Brown	(D)
14	William A. Ryan	(D)	38	Edward E. Mahalak	(D)
15	Joseph F. Young, Jr.	(D)	39	Patrick L. Harrington	(D)
16	Matthew McNeely	(D)	40	James E. Hadden	(R)
17	Frank V. Wierzbicki	(D)	41	Nick Smith	(R)
18	Carolyn C. Kilpatrick	(D)	42	Mark D. Siljander	(R)
19	Stanley Stopczynski	(D)	43	Carl F. Gnodtke	(R)
20	Juanita Watkins	(D)	44	Lad S. Stacey	(R)
21	Barbara-Rose Collins	(D)	45	Bela E. Kennedy	(R)
22	Gary M. Owen	(D)	46	Mary C. Brown	(D)
23	Mary Keith Ballantine	(R)	47	Robert Welborn	(R)
24	Richard D. Fessler	(R)	48	Richard G. Fitzpatrick	(D)

TABLE IX-2. COUNTY SEATS, PROSECUTING ATTORNEYS, AND CLERKS OF MICHIGAN COUNTIES: 1981-1982 (cont.)

County	Seat	Prosecuting Attorney	Clerk
Sanilac	Sandusky	Robert W. Barnes, (R)	Delene Schultheiss, (R)
Schoolcraft	Manistique	Bruce Plackowski, (D)	Ferdinand Lesica, (D)
Shiawassee	Corunna	David E. McClernan, (R)	Elna M. Thatcher, (R)
Tuscola	Caro	Artis M. Noel, (R)	Elsie Kicks, (R)
Van Buren	Paw Paw	Ward "Steve" Hamlin, (R)	C. E. MacDonald, (R)
Washtenaw	Ann Arbor	William F. Delhey, (R)	Robert M. Harrison, (R)
Wayne	Detroit	William L. Cahalan, (D)	James. R. Killeen, (D)
Wexford	Cadillac	J. G. Harris, Jr., (R)	Keith G. Knudsen, (R)

SOURCE: Michigan Department of Management and Budget, County Officers Sheet 1981-1982 (Lansing: 1980).

(R): Republican

(D): Democrat

TABLE IX-4. MICHIGAN REPRESENTATION IN THE STATE HOUSE OF REPRESENTATIVES, BY DISTRICT: 1981-1982 (cont.)

District	Representative	Party	District	Representative	Party
49	Everitt F. Lincoln	(R)	73	Leo R. Laconde	(D)
50	Michael J. Griffin	(D)	74	John M. Maynard	(D)
51	Frederick Dillingham	(R)	75	David H. Evans	(D)
52	Roy Smith	(R)	76	Dan L. Degrow	(R)
53	Perry Bullard	(D)	77	Keith Muxlow	(R)
54	Paul Hillegonds	(R)	78	John E. Strand	(R)
55	Donald H. Gilmer	(R)	79	Joe Conroy	(D)
56	Ernest Nash	(R)	80	Thomas E. Scott	(D)
57	David C. Hollister	(D)	81	Robert Emerson	(D)
58	Debbie Stabenow	(D)	82	Bobby D. Crim	(D)
59	H. Lynn Jondahl	(D)	83	Charles L. Mueller	(R)
60	Claude A. Trim	(D)	84	Loren S. Armbruster	(R)
61	Mat J. Dunaskiss	(R)	85	James E. O'Neill, Jr.	(D)
62	L. Jean Willoughby	(R)	86	Lewis N. Dodak	(D)
63	Ruth B. McNamee	(R)	87	Francis R. Spaniola	(D)
64	Wilber V. Brotherton	(R)	88	Alan L. Cropsey	(R)
65	James E. Defebaugh	(R)	89	Gary L. Randall	(R)
66	Gary Vanek	(D)	90	Martin D. Buth	(R)
67	Joseph Forbes	(D)	91	Paul Henry	(R)
68	Shirley Johnson	(R)	92	Thomas C. Mathieu	(D)
69	Dana F. Wilson	(D)	93	John R. Otterbacher	(D)
70	John T. Kelsey	(D)	94	Jelt Sietsema	(D)
71	Douglas Cruce	(R)	95	James K. Dressel	(R)
72	Nick Ciaramitaro	(D)	96	Marvin L. M. Knight	(R)

TABLE IX-4. MICHIGAN REPRESENTATION IN THE STATE HOUSE OF REPRESENTATIVES, BY DISTRICT: 1981-1982 (cont.)

District	Representative	Party	District	Representative	Party
97	Edgar A. Geerlings	(R)	104	Connie Binsfeld	(R)
98	Ed Giese	(R)	105	Tom Alley	(D)
99	Donald Van Singel	(R)	106	Steven Andrews	(R)
100	J. Michael Busch	(R)	107	Charles H. Varnum	(R)
101	James A. Barcia	(D)	108	Dominic J. Jacobetti	(D)
102	Michael D. Hayes	(R)	109	Jack L. Gingrass	(D)
103	Ralph Ostling	(R)	110	Donald W. Koiuisto	(D)

SOURCE: Michigan Department of Management and Budget, special release.

(R): Republican

(D): Democrat

TABLE IX-5. LEGISLATIVE AND EXECUTIVE ACTION ON BILLS: 1958-1980

	House activity			Senate activity			Gubernatorial action	
Year	House bills introduced	House bills passed House	Senate bills passed House	Senate bills introducted	Senate bills passed Senate	House bills passed Senate	Bills presented to the Governor	Bills vetoed[a]
1958	589	255	100	341	135	137	237	6
1959	659	272	121	392	159	162	283	5
1960	552	171	70	245	103	97	167	3
1961	681	252	103	396	171	155	258	17
1962	782	244	92	458	150	161	253	10
1963	840	239	87	383	177	167	254	3
1964	958	250	112	529	215	193	305	8
1965	1,031	377	178	699	287	264	442	26
1966	1,021	394	106	539	184	260	366	15
1967[b]	1,300	267	152	823	239	168	320	0
1968	971	276	147	585	241	225	372	12
1969	1,924	310	159	1,114	321	198	357	11
1970	974	336	112	669	197	151	264[c]	10
1971	1,841	376	99	1,112	204	136	235	2
1972	578	218[d]	131	383	140	257[d]	388[c]	8
1973	1,526	275	105	1,071	178	123	215	5
1974	792	264	141	935	163	251	300	3
1975	1,877	420	114	1,247	208	246	344	8
1976	782	278	176	497	199	294	468	14
1977	1,835	396	105	1,285	200	225	322	3
1978	914	430	219	460	284	433	657	15
1979	1,369	283	85	903	176	146	225	5
1980	790	354	202	430	208	354	546	22

SOURCE: State of Michigan, Journal of the Senate 1974 (Lansing: annually), p. 2390, and special release.

a. One veto was overriden during 1977.
b. Including extra session.
c. In 1970 the legislature recalled one bill; in 1972, two.
d. Bills introduced it the first year of a new legislature carry over into the second year; since 1972 was the second year of the 76th legislature, the excess of House bills passing the Senate over those passing the House is explained.

TABLE IX-6. PRESIDENTAL VOTE IN MICHIGAN: 1920-1980

Year	Republican	Democratic	Other	Total
1920	762,865	233,450	52,096	1,048,411
1924	874,631	152,359	133,429	1,160,419
1928	965,396	396,762	9,924	1,372,082
1932	739,894	871,700	53,171	1,664,765
1936	699,733	1,016,794	88,571	1,805,098
1940	1,039,917	1,032,991	13,021	2,085,929
1944	1,084,423	1,106,899	13,901	2,205,223
1948	1,038,595	1,003,448	67,566	2,109,609
1952	1,551,529	1,230,657	16,406	2,798,592
1956	1,713,647	1,359,898	6,923	3,080,468
1960	1,620,428	1,687,269	10,400	3,318,097
1964	1,060,152	2,136,615	6,335	3,203,102
1968	1,370,665	1,593,082	342,503	3,306,250
1972	1,961,721	1,459,435	68,571	3,489,727
1976	1,893,742	1,696,714	61,134	3,651,590
1980	1,915,225	1,661,532	401,890	3,978,647

SOURCES: Michigan Department of Management and Budget, *Michigan Manual*, 1975-1976 and 1961-1962 (Lansing: biennially), p. 122 (1975-1976); and Michigan Secretary of State, special release (1976 and 1980 data).

Data on the federal tax burden are rough estimates prepared by the Tax Foundation, Inc., a nonprofit research foundation. In developing figures for each state, the Tax Foundation allocates individual income tax liabilities on the basis of data reported by the Internal Revenue Service in its Statistics of Income series, the same documents from which Tables X-3 and X-4 were developed. The distribution of personal and property income; the assumption is that one-half of the levy is passed on to consumers through prices, and the other half is shifted backward to property owners in general. Property income is a component of personal income, accounting for roughly one-seventh of the aggregate. Estate and gift taxes are assumed to be distributed according to the previous six years' total of estate and gift taxes are reported in the Annual Report of the Commissioner of Internal Revenue. Excise taxes on alcoholic beverages are assumed to follow the geographic pattern of consumption of distilled spirits, malt beverages, and wines. The state-by-state distribution of tobacco taxes is patterned after population. Similar procedures are used to estimate other federal revenues, in each case employing the most appropriate allocator.

State and local revenue data are collected by the Bureau of the Census in its quinquennial Census of Governments, the latest of which covers 1977. For interim years, the Bureau of the Census develops statistics based on a sample of local governments in each state, along with reports from the District of Columbia and each of the fifty states. No agency, public or private, assesses the geographic burden of state and local revenues in a manner parallel to the Tax Foundation's assessment of the federal tax burden. This means that the Michigan Single Business Tax, for example, is assumed to be borne entirely by residents of this state (Table X-2 and so forth), although it is certainly exported, to some extent, with every car and truck that rolls from an assembly line destined for another state or country. Similarly, part of the well head taxes levied in Texas, Louisiana, Oklahoma, and Wyoming are paid, in the final analysis, by Michiganians and other Americans.

For a number of reasons, the data published by the Bureau of the Census vary from those published in the Michigan State Tax Commission's State of Michigan Financial Report, and by other in-state sources. The major reason for frequent disagreement is the inclusion of publicly owned community colleges, colleges, and universities in the Bureau of the Census definition of government. In Tables X-8 and X-9, current charges for education include student tuition and fees paid to the state and locally operated colleges and universities; Tables X-18 and X-19 include expenditures of these institutions (pay to faculty, and so forth). In Tables X-5 and X-10, student fees, tuition, and other revenues derived independently by higher education are not included as part of state revenues; Table X-20 reports only expenditures for higher education that the state spends, not the total amount expended by the institutions themselves. Interested readers are encouraged to consult the chapter on education.

X. GOVERNMENTAL FINANCE AND EMPLOYMENT

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TABLE X-1. AVERAGE EMPLOYMENT IN GOVERNMENT IN MICHIGAN AND THE UNITED STATES: 1956-1980.

(In thousands)

Year	Michigan			Michigan		
	Federal	State	Local	Federal	State	Local
1956	42.4	63.1	207.5	2,209	1,249.5	3,819.0
1957	43.0	64.2	208.4	2,217	1,328.2	4,070.5
1958	43.6	66.5	210.3	2,191	1,415.2	4,232.2
1959	44.0	68.5	212.2	2,233	1,484.3	4,365.8
1960	46.3	71.1	215.3	2,270	1,535.7	4,547.2
1961	47.4	73.4	217.1	2,279	1,607.0	4,707.9
1962	47.0	72.4	223.2	2,340	1,668.4	4,881.2
1963	49.2	73.8	236.4	2,358	1,746.7	5,120.8
1964	48.5	76.9	247.5	2,348	1,856.0	5,391.2
1965	50.6	83.2	261.0	2,378	1,995.9	5,700.2
1966	53.7	94.0	284.6	2,564	2,140.8	6,079.5
1967	56.5	97.8	300.1	2,719	2,301.7	6,370.5
1968	57.9	102.4	310.4	2,737	2,441.8	6,659.8
1969	56.2	109.6	327.9	2,758	2,533.0	6,903.3
1970	57.7	116.0	333.0	2,731	2,664.4	7,158.3
1971	54.9	117.8	336.8	2,696	2,747.4	7,437.3
1972	55.3	122.5	349.1	2,684	2,859.3	7,790.0
1973	55.0	123.9	355.5	2,663	2,922.6	8,145.8
1974	56.3	127.5	378.8	2,724	3,038.5	8,407.0
1975	56.1	132.6	394.4	2,748	3,179.3	8,757.9
1976	55.5	135.1	404.0	2,733	3,272.9	8,864.6
1977	54.7	136.9	405.2	2,727	3,376.9	9,022.5
1978	54.6	143.6	413.2	2,753	3,473.5	9,445.5
1979	56.7	147.7	416.6	2,773	3,536.3	9,610.5
1980	58.4	151.1	418.3	2,866	3,575.1	9,728.9

SOURCE: Michigan Employment Security Commission Special release, and Bureau of Labor Statistics, Employment and Earnings, (Washington, D.C.; Monthly), April 1981, Tables B-1 and B-20.

TABLE X-2. STATE AND LOCAL TAX COLLECTIONS AND FEDERAL TAX BURDEN IN MICHIGAN AND THE UNITED STATES, FISCAL YEARS: 1962-1980

(Millions of dollars)

	Federal		States		Local		Total	
Fiscal year	Michigan	United States	Michigan	United States	Michigan	United States	Michigan	United States
1962	4,217	94,329	1,007.5	20,561.1	888.7	20,993.0	6,113.2	135,883.1
1963	n.a.	n.a.	1,142.7	22,166.7	959.4	22,164.3	n.a.	n.a.
1964	4,617	106,317	1,220.2	24,242.7	1,001.8	23,542.1	6,839.0	154,101.8
1965	n.a.	n.a.	1,328.6	26,126.1	1,052.5	25,451.4	n.a.	n.a.
1966	5,590	123,402	1,467.7	29,379.8	1,127.6	27,360.8	8,185.3	180,142.6
1967	n.a.	n.a.	1,530.8	31,926.0	1,184.4	29,074.0	n.a.	n.a.
1968	6,982	143,950	1,885.6	36,400.2	1,319.3	31,171.4	10,186.9	211,521.6
1969	n.a.	n.a.	2,248.8	41,930.7	1,505.4	34,781.2	n.a.	n.a.
1970	8,936	186,947	2,345.1	47,962.0	1,697.9	38,833.3	12,979.0	273,742.3
1971	n.a.	n.a.	2,543.9	51,541.2	1,876.7	43,434.0	n.a.	n.a.
1972	8,949	193,697	3,062.4	59,870.0	2,184.7	49,739.0	14,196.1	303,306.0
1973	n.a.	n.a.	3,527.6	68,069.3	2,216.9	53,032.4	n.a.	n.a.
1974	11,492	243,467	3,681.2	74,207.0	2,497.8	56,515.0	17,671.0	374,189.0
1975	n.a.	n.a.	3,486.0	80,154.9	2,757.0	61,310.1	n.a.	n.a.
1976	12,919	278,420	3,769.5[a]	89,255.5	3,049.8	67,557.4	19,738.3	435,232.9
1977	n.a.	n.a.	4,843.7	101,084.0	3,137.9	84,851.6	n.a.	n.a.
1978	17,357	389,164	5,444.9	113,260.9	3,365.9	80,380.8	26,167.8	582,805.7
1979	20,737	450,816	6,017.7	124,962.9	3,645.8	80,606.1	30,400.5	656,385.0
1980	23,394	500,950	5,947.6	137,075.2	4,008.8	86,387.5	33,350.4	724,412.7

SOURCE: Bureau of the Census, *1977 Census of Governments, Compendium of Government Finances* (Washington, D.C.: 1979), vol. 4, no. 5, Tables 3 and 47, and similar documents for 1957 (Table 24), 1962 (Table 25), 1967 (Table 23), and 1972 (Table 23); Bureau of the Census, *Governmental Finances, 1979-80* (Washington, D.C.: 1981), Table 6, and similar documents for other years between quinquennial Censuses of Governments; and Tax Foundation, Inc., *Facts and Figures on Government Finance, 1958-59 through 1981* (New York: biennially), Table 101 (1980), and special release (1979 data).

a. Pertains to the fiscal year ended 30 June 1976. The 1977 fiscal year ended 30 September 1977. During the fiscal year ended 30 June 1976, state tax collections totaled $3,769,500,000. If the fiscal year had ended 30 September 1976, they would have totaled around $4,200,000,000.
n.a.: not available.

TABLE X-3. COMPARATIVE FEDERAL PERSONAL INCOME TAX STATISTICS, MICHIGAN AND THE UNITED STATES: 1956-1978

			Thousands of dollars							
	Number of returns (000)		Adjusted gross income		Salaries and wages		Taxable income		Income tax[a]	
Year	Michigan	United States	Michigan	United States	Michigan	United States	Michigan	United States	Michigan	United States
1956	2,715	59,181	13,911	267,653	11,617	215,677	7,861	141,446	1,839	32,706
1957	2,699	59,824	14,238	280,229	12,087	228,009	7,967	149,312	1,845	34,382
1958	2,576	59,080	12,922	281,252	10,947	227,618	6,991	149,401	1,607	34,351
1959	2,601	60,260	14,218	305,200	14,218	305,371	7,975	166,574	1,821	38,653
1960	2,624	61,025	14,822	315,832	12,623	258,170	8,300	171,932	1,908	39,545
1961	2,580	61,498	14,630	330,074	12,288	266,989	8,168	181,940	1,892	42,271
1962	2,612	62,709	15,949	348,707	13,526	283,367	9,159	195,307	2,107	44,893
1963	2,682	63,943	17,033	368,728	14,362	299,381	9,976	209,090	2,315	48,204
1964	2,778	65,375	18,922	396,717	15,856	323,292	11,409	229,881	2,361	47,160
1965	2,946	67,599	20,959	429,254	17,480	347,199	13,152	255,070	2,582	49,525
1966	3,051	70,153	23,003	468,347	19,329	380,934	14,779	286,230	2,934	56,071
1967	3,081	71,653	24,061	504,719	20,095	411,537	15,661	314,990	3,154	62,899
1968	3,169	73,731	26,372	554,337	22,092	451,430	17,322	352,672	3,776	76,611
1969	3,255	75,845	28,920	603,602	24,686	498,973	19,326	388,817	4,343	86,569
1970	3,155	74,278	29,267	631,626	25,256	531,869	19,067	401,057	4,005	83,759
1971	3,143	74,573	31,283	673,677	27,132	565,056	19,880	414,028	4,100	85,253
1972	3,270	77,570	35,084	746,006	30,403	622,656	21,912	445,558	4,599	93,354
1973	3,423	80,693	39,221	827,148	34,162	687,179	25,194	511,929	5,350	107,901
1974	3,461	83,340	41,248	905,523	36,163	758,629	26,638	573,606	5,723	123,465
1975	3,355	82,177	41,156	948,094	35,811	795,213	26,418	595,626	5,547	124,624
1976	3,461	84,536	46,834	1,053,593	40,682	879,770	30,829	674,428	6,521	140,919
1977	3,572	86,493	52,949	1,155,699	46,427	965,608	n.a.	n.a.	7,856	159,331
1978	3,699	89,889	59,953	1,304,188	52,391	1,092,017	n.a.	n.a.	9,193	188,577

SOURCE: Internal Revenue Service, Statistics of Income, Individual Income Tax Returns (Washington, D.C.: annually), Table 5.I (1980).

NOTE: Items included on income tax returns filed by Michigan and U.S. residents.

a. After credits.

n.a.: not available.

TABLE X-4. DETAILED FEDERAL PERSONAL INCOME TAX STATISTICS, MICHIGAN AND THE UNITED STATES: 1977 AND 1978

Item	Michigan		United States		Michigan as a percentage of United States	
	1977	1978	1977	1978	1977	1978
Number of returns	3,572,396	3,699,523	86,493,391	89,889,669	4.1	4.1
Adjusted gross income less deficit	52,949,467	59,953,537	1,155,699,081	1,304,188,847	4.6	4.6
Salaries and wages (gross):						
Number of returns	3,231,391	3,365,297	77,206,389	80,448,353	4.2	4.2
Amount	46,427,165	52,391,289	965,608,459	1,092,017,073	4.8	4.8
Business or profession net profit less net loss:						
Number of returns	259,029	266,722	7,715,345	8,177,557	3.4	3.3
Amount	1,735,788	1,940,958	49,354,268	53,328,305	3.5	3.6
Farm net profit less net loss:						
Number of returns	66,099	68,699	2,496,761	2,684,870	2.6	2.6
Amount	-13,223	18,537	804,009	3,809,916	--	4.9
Partnership net profit less net loss:						
Number of returns	103,286	87,038	2.735.037	2,819,262	3.9	3.1
Amount	412,856	502,138	13,655,888	15,407,324	3.0	3.3
Sales of capital assets net gain less net loss:						
Number of returns	278,970	316,808	8,622,095	8,629,526	3.2	3.7
Amount	417,056	525,848	19,661,021	22,041,666	2.1	2.4
Sales of property other than Capital assets net gain less net loss:						
Number of returns	31,201	35,590	977,137	1,064,558	3.2	3.3
Amount	28,174	29,822	539,464	1,246,753	5.2	2.4
Domestic & foreign dividends received:						
Total:						
Number of returns	565,282	571,457	13,370,279	13,580,092	4.2	4.2
Amount	1,040,875	1,314,682	28,591,308	31,634,519	3.6	4.2

TABLE X-4. DETAILED FEDERAL PERSONAL INCOME TAX STATISTICS, MICHIGAN AND THE UNITED STATES: 1977 AND 1978 (cont.)

Item	Michigan 1977	Michigan 1978	United States 1977	United States 1978	Michigan as a percentage of United States 1977	Michigan as a percentage of United States 1978
Interest received:						
Number of returns	1,927,281	2,018,222	43,961,840	46,215,026	4.4	4.4
Amount	2,002,325	2,170,304	54,409,964	60,947,334	3.7	3.6
Rent net income less net loss:						
Number of returns	218,654	197,506	6,797,526	6,934,097	3.2	2.8
Amount	82,171	-4,490	3,297,543	3,259,911	2.5	--
Royalty net income less net loss:						
Number of returns	8,790	20,261	573,415	639,299	1.5	2.1
Amount	14,751	51,849	2,227,979	2,573,943	0.7	2.0
Estate or trust net income less loss:						
Number of returns	16,425	21,376	740,199	775,958	2.2	2.7
Amount	73,089	55,639	2,749,205	2,990,517	2.7	1.9
Pensions and annuities in adjusted gross income:						
Number of returns	262,026	291,820	6,224,656	6,406,211	4.2	4.5
Amount	1,091,561	1,267,707	29,475,542	32,883,949	3.7	3.8
Total income tax:						
Number of returns	2,734,156	2,946,215	64,349,872	68,805,961	4.2	4.3
Amount	7,856,451	9,193,960	159,330,829	188,577,186	4.9	4.9
Total tax liability:						
Number of returns	2,791,909	2,989,344	66,138,167	70,563,344	4.2	4.2
Amount	8,003,284	9,344,081	163,513,341	193,464,593	4.9	4.8

SOURCE: Internal Revenue Service, *Preliminary Statistics of Income, 1978, Individual Income Tax Returns,* (Washington, D.C.: 1980); Table 8; and a similar document for 1977.

TABLE X-5. SOURCE, YEAR OF ADOPTION, AND DISPOSITION OF MICHIGAN STATE AND LOCAL TAXES

Tax source	Year adopted	Fiscal year 1979 ($000)	Fiscal year 1980 ($000)	Disposition
State taxes				
Individual income tax	1967	1,943,478	1,912,097	12.1 percent of gross collections at 2.6 percent tax rate is distributed to local governments, 47 percent on a per capita basis to counties and 53 percent to other local units. The balance of the income tax revenues go to the State General Fund. (Different percentage allocations effective 1980.)
Business privilege taxes				
Single business tax	1975	1,001,301	1,076,010	State General Fund. Local units are reimbursed for loss of revenue due to the repeal of the inventory property tax replaced by the SBT.
Boxing and wrestling tax	1919	90	136	State General Fund
Foreign insurance company premium tax	1869	108,778	148,570	State General Fund
Horse race wagering tax	1933	27,512	27,230	State General Fund-with payments to cities hosting tracks, payments to purses, and payments for racing supervision.
Oil and gas severance tax	1929	14,212	46,878	State General Fund
Consumption taxes				
Beer and wine taxes (combined)	1933	50,435	50,730	State General Fund
Cigarette tax	1929	140,365	141,206	4.5 mills (9¢ per pack) to the General Fund and 1 mill (2¢ per pack) to the State School Aid Fund.
Liquor excise tax	1957	17,565	18,585	School Aid Fund
Liquor specific taxes	1959	17,565	18,585	General Fund
Liquor specific taxes	1973	6,274	6,707	Liquor Purchase Revolving Fund (LPRF)
Total liquor taxes		41,404	53,876	
Sales tax	1933	1,506,289	1,503,973	60% School Aid Fund, 15% to cities villages, and townships; 25% State General Fund.
Use tax	1937	232,896	232,320	State General Fund

TABLE X-5. SOURCE, YEAR OF ADOPTION, AND DISPOSITION OF MICHIGAN STATE AND LOCAL TAXES (cont.)

		Fiscal year		
Tax source	Year adopted	1979 ($000)	1980 ($000)	Disposition
State taxes (cont.)				
Transportation taxes:				
Aircraft reg. & transfer fee	1923	65	71	Aeronautics Fund
Aviation gasoline tax	1929	4,463	3,431	Aeronautics Fund
Diesel fuel tax	1947	30,418	25,557	Current: 44.5 percent motor Vehicle Highway Fund for distribution to the state, 35.7 percent to counties, and 19.8 percent to cities and villages. (Different percentage distribution for 1979 and 1980).
Gasoline tax	1925	470,561	448,193	Current: 44.5 percent Motor Vehicle Highway Fund for distribution to the state, 35.7 percent to counties, and 19.8 percent to cities and villages. 1/2¢ to General Transportation Fund $3.5 million for repayment of Mackinaw Bridge bonds. (Different % allocations effective 1979 and 1980).
Liquified petroleum gas tax	1953	298	359	Current: 8.5¢ Motor Vehicle Highway Fund; 1/2¢ to Gen. Trans. Fund. (Different % allocation 1979 and 1980).
Marine vessel fuel tax	1947	7	7	Waterways Fund
Motor carriers privilege fee	1923	n.a.	1,280	Credited to the Public Service Commission. Balance after administration to Motor Vehicle Highway Fund.
Motor vehicle weight registration tax	1905	235,344	236,250	Current: Motor Vehicle Highway Fund. (Different allocation effective 1979).
Watercraft registration fee	1967	1,330,995	1,187	25% Waterways Fund; 75% Marine Safety Fund.
State property taxes:				
Commercial forest tax	1925	n.a	519	Specific: distributed to the local units in the same proportions as the general property tax. Withdrawal: State General Fund.

TABLE X-5. SOURCE, YEAR OF ADOPTION, AND DISPOSITION OF MICHIGAN STATE AND LOCAL TAXES (cont.)

Tax source	Year adopted	Fiscal year 1979 ($000)	Fiscal year 1980 ($000)	Disposition
State taxes (cont.)				
State property taxes:				
Inheritance taxes	1899	53,785	50,396	State General Fund and County General Funds.
Intangibles tax	1939	38,377	41,772	$9.5 million to cities, villages and townships, remainder to the State General Fund.
Stumpage yield tax	1925	154	213	State General Fund
Utility property tax	1905	89,485	96,468	State General Fund
Local taxes				
Accommodations tax	1974	n.a.	n.a.	Dedicated to convention factilities and promotion of conventions and tourism, less costs of administering the tax.
Uniform city income tax	1964	223,354	223,354	City General Fund
Uniform city utility users tax	1970	n.a.	37,441	General Fund of the city to be used exclusively for public safety.
General property tax	1893	3,890,400[a]	3,889,378	To the local units and school districts as determined locally.
Grain tax[b]	1945	n.a	n.a.	Local taxing units in the same proportion as general personal property taxes.
Industrial facility tax	1974	9,127	n.a.	Same as for the general property tax except the share of local and intermediate school districts receiving general state school aid to be paid to the State School Aid Fund.
Iron ore specific tax	1951	6,327	n.a.	School districts and local units in the same proportion as the general property tax.
Mobile home-trailer-coach tax[c]	1959	n.a.	n.a.	Counties: 50¢; municipalities: 50¢; school districts: $2.00.

TABLE X-5. SOURCE, YEAR OF ADOPTION, AND DISPOSITION OF MICHIGAN STATE AND LOCAL TAXES (cont.)

Tax source	Year adopted	Fiscal year 1979 ($000)	Fiscal year 1980 ($000)	Disposition
Local taxes (cont.)				
Real estate property transfer tax[d]	1966	n.a	n.a.	General Fund in county where tax is collected.
Tax reverted recreation and forest land transfer payment (Swamp tax)	1917	2,115[e]	n.a.	Counties and townships each receive $ .60, and schools, $ .30.

SOURCE: Michigan Department of Management and Budget, special release.

a. Estimate

b. Amounted to $321,000 in 1977.

c. Amounted to $2,995,000 in 1977.

d. Amounted to $6,500,000 in 1977.

e. Actual amount owed in 1979 was $5,287,277. Part was paid in 1980 because of delay in appropriations.

n.a.: not available.

TABLE X-6. ORIGIN AND ALLOCATION, BY LEVEL OF GOVERNMENT, OF GENERAL REVENUE OF MICHIGAN STATE AND LOCAL GOVERNMENTS: FISCAL YEARS 1957-1979

(In millions of dollars)

Year	Originating level of government			Final recipient level of government		Total general revenue
	Federal	State	Local	State	Local	
1956-57	143.0	870.7	795.5	571.3	1,237.9	1,809.2
1957-58	174.1	907.1	911.1	612.5	1,379.8	1,992.3
1958-59	216.3	931.5	945.5	649.4	1,443.9	2,093.3
1959-60	222.7	1,049.0	994.3	736.2	1,529.8	2,266.0
1960-61	278.0	1,112.4	1,117.1	819.3	1,688.2	2,507.1
1961-62	289.5	1,156.6	1,141.1	910.9	1,676.2	2,587.1
1962-63	338.9	1,311.5	1,249.6	990.7	1,909.2	2,899.9
1963-64	404.3	1,408.6	1,312.3	1,144.0	1,981.2	3,125.2
1964-65	426.2	1,545.5	1,398.6	1,255.2	2,115.1	3,370.3
1965-66	471.9	1,724.0	1,528.6	1,347.0	2,377.6	3,724.6
1966-67	593.6	1,835.4	1,623.5	1,435.5	2,617.0	4,052.5
1967-68	637.6	2,226.6	1,800.3	1,868.2	2,796.2	4,664.5
1968-69	711.0	2,640.1	2,053.9	2,160.3	3,244.7	5,405.0
1969-70	818.2	2,769.7	2,330.6	2,264.5	3,654.0	5,918.5
1970-71	1,019.1	3,019.3	2,574.3	2,490.9	4,121.9	6,612.7
1971-72	1,306.9	3,572.1	3,038.9	3,121.8	4,796.2	7,918.0
1972-73	1,769.7	4,121.3	3,109.1	3,822.7	5,177.5	9,000.2
1973-74	1,845.2	4,417.1	3,538.4	3,889.5	5,911.3	9,800.8
1974-75	2,124.4	4,267.9	3,947.0	3,846.9	6,492.4	10,339.3
1975-76	2,667.3	4,607.0[a]	4,319.8	4,327.0	7,267.0	11,594.1
1976-77	2,841.1	5,763.5	4,580.3	5,192.1	7,992.8	13,184.9
1977-78	3,131.3	6,556.6	4,793.9	5,901.9	8,579.9	14,481.8
1978-79	3,399.8	7,302.0	5,408.3	6,612.8	9,497.2	16,110.0

SOURCES: Bureau of the Census, U.S. Census of Governments, 1972, vol. 4, Government Finances, no. 5, Compendium of Government Finances (Washington, D.C.: 1974), Table 23, and similar census documents for 1957 (Table 24), 1962 (Table 25), and 1967 (Table 23); and Bureau of the Census, Governmental Finances, 1978-79 (Washington, D.C.: 1980), Series GF-78, no. 5, Table 7.

NOTE: Includes revenues of public institutions of higher education, exclusive of their state or local support.

a. Pertains to the fiscal year ended 30 June 1976. The 1977 fiscal year ended 30 September 1977. During the fiscal year ended 30 June 1976, state tax collections totaled $3,769,500,000. If the fiscal year had ended 30 September 1976, they would have totaled around $4,200,000,000.

TABLE X-7 PERCENTAGE OF GENERAL REVENUE OF STATE AND LOCAL GOVERNMENTS ORIGINATING AT FEDERAL, STATE, AND LOCAL LEVEL, MICHIGAN AND UNITED STATES: FISCAL YEARS 1957-1979

	Originating level of government						Final recipient level of government			
	Michigan			United States			Michigan		United States	
Year	Federal	State	Local	Federal	State	Local	State	Local	State	Local
1956-57	7.9	48.1	44.0	10.1	43.1	46.8	31.6	68.4	34.2	65.8
1957-58	8.7	45.5	45.7	11.8	41.3	46.9	30.7	69.3	33.6	66.4
1958-59	10.3	44.5	45.2	14.1	40.2	45.8	31.0	69.0	35.1	64.9
1959-60	9.8	46.3	43.9	13.8	40.8	45.4	32.5	67.5	35.8	64.2
1960-61	11.1	44.4	44.6	13.2	40.5	46.3	32.7	67.3	34.3	65.7
1961-62	11.2	44.7	44.1	13.5	40.6	45.8	35.2	64.8	34.8	65.2
1962-63	11.7	45.2	43.1	13.9	40.8	45.4	34.2	65.8	35.1	64.9
1963-64	12.9	45.1	42.0	14.6	41.2	44.2	36.6	63.4	36.2	63.8
1964-65	12.6	45.9	41.5	14.8	41.2	44.0	37.2	62.8	36.1	63.9
1965-66	12.7	46.3	41.0	15.8	41.6	42.6	36.2	63.8	36.6	63.4
1966-67	14.6	45.3	40.1	16.9	41.4	41.7	35.4	64.6	36.9	63.1
1967-68	13.6	47.7	38.5	16.9	42.6	40.3	40.0	59.9	38.3	61.6
1968-69	13.1	48.8	37.9	16.7	43.2	40.0	39.9	60.0	37.9	62.0
1969-70	13.8	46.7	39.3	16.7	43.9	39.3	38.2	61.7	38.8	61.1
1970-71	15.4	45.6	38.9	18.0	42.2	39.6	37.6	62.3	37.2	62.7
1971-72	16.5	45.1	38.4	18.7	42.2	39.1	39.4	60.6	37.9	62.1
1972-73	19.7	45.8	34.5	20.6	42.3	37.1	42.5	57.5	38.5	61.5
1973-74	18.8	45.1	36.1	20.1	42.9	36.9	39.7	60.3	37.4	62.6
1974-75	20.5	41.3	38.2	20.6	42.4	37.0	37.2	62.8	36.6	63.4
1975-76	23.0	39.7	37.3	21.7	41.9	36.4	37.3	62.7	38.1	61.9
1976-77	21.5	43.7	34.7	21.9	42.4	35.7	39.4	60.6	38.3	61.7
1977-78	21.6	45.3	33.1	22.0	42.9	35.0	39.4	60.6	40.8	59.2
1978-79	21.1	45.3	33.6	21.9	44.0	34.1	41.0	59.0	39.0	61.0

SOURCES: Bureau of the Census, U.S. Census of Governments, 1972, vol. 4, Government Finances, no. 5, Compendium of Government Finances (Washington, D.C.: 1974), Table 23, and similar census documents for 1957 (Table 24), 1962 (Table 25), and 1967 (Table 23); and Bureau of the Census, Governmental Finances, 1978-79 (Washington, D.C.: 1980), Series GF-78, no. 5, Table 7.

NOTE: Includes revenues of public institutions of higher education, exclusive of their state or local support.

TABLE X-8. REVENUE OF LOCAL GOVERNMENTS IN MICHIGAN AS DEFINED BY THE BUREAU OF THE CENSUS, FISCAL YEARS: 1962, 1967, 1972, 1977, AND 1980

(In millions of dollars)

Item	1962	1967	1972	1977	1980
General revenue	1,699.5	2,648.9	4,853.8	7,886.6	10,593.4
Federal government	19.3	57.1	248.7	799.3	1,168.3
State government	539.2	968.3	1,566.2	2,655.9	3,299.2
Own sources	1,141.1	1,623.5	3,395.9	4,431.4	6,125.9
Taxes	888.7	1,184.4	2,184.7	3,137.9	4,008.8
Property	877.9	1,109.4	2,005.4	2,874.8	3,699.1
Individual income	0	60.6	135.1	187.6	212.7[b]
Other	10.8	14.5	44.1	75.3	96.8
Charges & miscellaneous	252.4	439.1	854.2	1,293.5	2,916.5
Current charges	174.7	300.9	586.8	950.8	1,458.3
Education	44.2	91.9	135.1	203.5	259.7
School lunch[a]	25.1	41.7	63.4	70.7	n.a.
Other	19.1	50.2	71.7	132.9	682.7
Hospitals	60.2	101.4	207.0	347.4	515.8
Sewerage	21.0	34.0	85.3	151.4	n.a.
Airports	4.3	9.6	17.6	39.5	n.a.
Other	45.0	64.1	141.8	209.0	n.a.
Special assessments	22.0	30.9	63.9	38.7	n.a.
Sale of property	4.8	15.0	10.3	5.5	n.a.
Interest earnings	17.7	50.9	102.8	143.1	386.7
Other	33.2	41.3	90.3	155.4	272.1
Utility revenue	138.4	184.0	251.7	411.4	519.7
Water supply	75.2	105.4	152.8	239.0	n.a.
Electric power	34.1	45.7	59.6	137.2	n.a.
Transit	29.0	32.9	39.3	35.1	n.a.
Insurance trust revenue, Employee retirement	35.9	54.5	105.2	163.0	267.3
TOTAL	1,873.8	2,887.3	5,210.8	8,461.0	11,380.4

SOURCE: Bureau of the Census, U.S. Census of Governments, 1977, vol. 4, Government Finances, no. 5, Compendium of Government Finances (Washington, D.C.: 1979), Table 47, and similar census documents for 1962 (Table 46), 1967 (Table 46), and 1972 (Table 46); and Bureau of the Census, Governmental Finances, 1979-80 (Washington, D.C.: 1981), Series GF-80, No. 5, Table 5.

a. Gross sales.

b. Individual & Corporate Income.

n.a.: not available.

TABLE X-9. REVENUE OF THE STATE OF MICHIGAN AS DEFINED BY THE BUREAU OF THE CENSUS, FISCAL YEARS: 1962, 1967, 1972, 1977, AND 1980

(In millions of dollars)

Item	1962	1967	1972	1977	1980
General Revenue	1,450.1	2,403.8	4,688.0	7,891.6	10,277.2
Federal government[a]	270.2	536.5	1,058.2	2,042.2	2,729.1
Local government	23.3	31.9	57.6	85.8	87.7
Own sources	1,156.6	1,835.4	3,572.1	5,763.5	7,460.4
Taxes	1,107.5	1,530.8	3,062.4	4,843.7	5,947.7
Property	57.3	81.0	93.3	117.7	133.4
General sales and use	460.5	680.4	987.7	1,407.0	1,706.7
Selective sales	248.3	379.2	582.0	757.9	850.0
Motor fuel	152.6	190.8	300.8	430.4	473.6
Alcoholic beverages	14.0	58.4	72.0	80.0	90.3
Tobacco products	51.4	77.9	128.7	140.3	140.4
Other	30.3	52.0	81.0	107.2	145.8
Motor vehicle licenses	72.6	101.9	160.6	180.3	248.6
Individual income	0	0	728.9	1,465.5	1,916.6
Other	168.8	288.4	509.4	915.3	1,002.5
Charges & miscellaneous	149.1	304.6	509.8	919.8	1,512.7
Current charges	116.4	225.3	399.7	592.8	858.4
Education[b]	83.4	172.6	296.6	422.3	577.1
Hospitals	19.6	28.5	64.8	109.6	198.8
Other	13.4	24.2	38.3	60.9	82.6
Sale of property	1.5	1.4	2.3	1.2	1.6
Interest earnings	8.6	25.8	50.1	95.5	245.2
Other	22.5	52.2	57.7	230.3	407.5
Liquor Store Revenue	169.7	232.3	306.5	338.3	405.8
Insurance Trust Revenue	209.0	288.1	477.4	1,459.4	1,673.6
Unemployment compensation	160.8	181.9	247.8	967.1	1,023.0
Employee retirement	42.5	93.1	213.2	439.1	593.2
Other	5.7	13.1	16.4	53.2	57.4
TOTAL	1,828.7	2,924.2	5,471.9	9,689.2	12,356.6

SOURCE: Bureau of the Census, *U.S. Census of Governments, 1977*, vol. 4, *Government Finances*, no. 5, *Compendium of Government Finances* (Washington, D.C.: 1974 , Table 46, and similar census documents for 1962 (Table 46), and 1967 (Table 46), and 1972 (Table 46); and Bureau of the Census, *State Government Finances, 1980* (Washington, D.C.: 1980), Series GF-80, no. 3, Table 7.

[a] Includes federal payments to state institutions of higher education.

[b] Revenues of state institutions of higher education, exclusive of payments from state and federal government.

TABLE X-10. REVENUE OF STATE OF MICHIGAN, AS DEFINED BY THE STATE OF MICHIGAN (EXCLUSIVE OF REVENUES OF STATE INSTITUTIONS OF HIGHER EDUCATION), FISCAL YEARS: 1979 AND 1980

(In thousands of dollars)

Source	1979	1980
Taxes		
Sales tax	1,506,294	1,503,972
Personal income tax	1,943,478	1,912,044
Corporation income tax	13,915	6,975
Use tax	232,895	232,319
Cigarette tax	140,364	141,205
Beer and wine tax	50,434	50,729
Single business tax	1,001,300	1,076,010
Liquor excise tax	35,130	37,169
Horse race wagering tax	27,512	26,847
Intangibles tax	38,377	41,771
Inheritance tax	53,785	50,395
Telephone and telegraph company tax	87,413	93,828
Insurance company premium tax	108,778	148,569
Motor vehicle weight tax	235,343	236,249
Gasoline tax	472,287	448,218
Aviation fuel tax	4,462	3,431
Diesel fuel tax	30,417	25,556
Gas and oil severance tax	14,211	46,929
Industrial facilities tax	9,126	16,042
Watercraft registration tax	--	--
Delinquent railroad company tax (General Transportation Fund)	12,704	--
Penalties and interest-sales, income use, and single business tax	21,854	22,337
All other taxes	2,304	5,792
TOTAL	6,044,023	6,126,400
From federal agencies for:		
Social service programs	1,190,670	1,376,146
School lunch programs	79,499	91,362
Vocational education and rehabilitation	65,701	74,962
Elementary and secondary education	128,126	152,365
Various other educational purposes	32,529	40,788
Various public health programs	55,156	70,917
Mental health programs	24,906	14,538
State share of revenue sharing	96,457	98,122
Various conservation programs	21,805	25,737
Airways purposes	13,590	18,218
Highway purposes	156,165	163,518
Employment security commission-administration	94,011	132,417
Title II Counter-Cyclical Aid Payments	--	--

TABLE X-10. REVENUE OF STATE OF MICHIGAN, AS DEFINED BY THE STATE OF MICHIGAN (EXCLUSIVE OF REVENUES OF STATE INSTITUTIONS OF HIGHER EDUCATION), FISCAL YEARS: 1979 AND 1980 (cont.)

(In thousands of dollars)

Source	1979	1980
From federal agencies for:		
Omnibus crime control	17,889	18,397
Comprehensive employment and training	77,214	76,479
Older Americans Act	23,451	25,942
All other purposes	52,550	29,297
TOTAL	2,129,729	2,452,370
From local agencies for:		
Social services department programs	18,380	18,461
Mental health services	9,541	20,546
Highway construction	4,809	6,349
Special education	1,076	--
All other purposes	4,174	6,779
TOTAL	37,982	52,137
From services:		
Charges for furnishing vehicle driver records	9,935	11,945
Revenue from patients, wards, and inmates	31,021	32,626
All other services	5,375	5,467
TOTAL	46,332	50,039
From licenses and permits:		
Liquor retailer, manufacturer, and wholesaler licenses	9,205	13,187
Motor vehicle operator and chauffeur licenses	11,792	12,698
Corporation franchise fees	4,332	2,597
Examination fees, banks, building and loan companies, trust companies, credit unions, and insurance companies	2,838	3,569
Department of Licensing and Regulation licenses and permits	7,412	9,511
Concession and privilege fees-state parks	5,347	5,924
Motor vehicle title fees, license plate transfer and dealer's plates, various special fees and registrations	11,032	18,245
Hunting, fishing, and trapping licenses	18,935	25,153
Public utility assessment fees	4,822	7,836
Other licenses and permits	22,155	16,121
TOTAL	97,875	119,396

TABLE X-10. REVENUE OF STATE OF MICHIGAN, AS DEFINED BY THE STATE OF MICHIGAN (EXCLUSIVE OF REVENUES OF STATE INSTITUTIONS OF HIGHER EDUCATION), FISCAL YEARS: 1979 AND 1980 (cont.)

(In thousands of dollars)

Source	1979	1980
Miscellaneous:		
Income from investments	96,363	135,579
Various fines, fees, and assessments	10,384	10,878
District court fees	5,589	6,290
Oil and gas royalties, fees, assignments, and rentals	26,979	35,690
Farm production and sales	3,542	--
Lottery ticket sales	410,974	483,636
Air and water surveillance fees	3,837	4,329
Reimbursement of advances made by government fund	10,843	--
Other miscellaneous	33,461	31,294
TOTAL	601,977	717,786
From funds other than general and special revenue:		
Liquor purchase revolving fund	113,000	93,150
Escheats fund	5,000	--
Safe park improvement fund	5,118	--
Correctional industries revolving fund	2,193	--
Vietnam veteran era bonus fund	12,000	--
Other funds	7,874	107,335
TOTAL	145,186	2,434,932
TOTAL REVENUE	11,090,117	11,953,063

SOURCE: Michigan Department of Management and Budget, State of Michigan Financial Report, 1978 and 1979 (Lansing: annually), pp. 97-98 (1979).

a. Includes airport construction.

n.a.: not available.

TABLE X-11. INTERGOVERNMENTAL REVENUE IN MICHIGAN AS DEFINED BY THE BUREAU OF THE CENSUS, BY TYPE OF PROGRAM, FISCAL YEARS: 1962, 1967, 1972, 1977, AND 1980

(In millions of dollars)

Item	1962	1967	1972	1977	1980
General revenue from federal government to state of Michigan[a]					
Public welfare	76.5	141.9	485.4	996.6	1,308.8
Education	54.2	180.2	229.9	388.0	517.0
Highways	107.3	158.7	206.0	206.0	241.2
General revenue sharing	0	0	0	91.3	98.1
Employment security admin.	18.2	25.5	57.5	96.1	148.0
Health and hospitals	6.2	14.6	27.5	54.4	163.8
Natural resources	4.3	6.2	11.4	17.4	33.9
Other	3.4	9.3	40.5	192.4	218.3
TOTAL	270.2	536.5	1,058.2	2,042.2	2,729.1
Total revenue from state of Michigan to local governments					
Education	325.1	620.0	941.0	1,588.9	1,770.5
Highways	128.1	162.0	232.0	347.8	430.3
General support	76.3	88.0	186.0	463.1	570.2
Public welfare	60.1	66.0	80.0	221.8	136.1
Other	20.1	32.0	127.0	226.7	392.1
TOTAL	609.7	968.0	1,566.0	2,848.3	3,299.2
General revenue from federal government to local governments					
General revenue sharing	0	0	0	181.0	191.9
Other	19.3	57.1	248.7	618.3	976.4
TOTAL	19.3	57.1	248.7	799.3	1,168.3
General revenue from local governments to state of Michigan					
Highways	13.6	15.8	26.4	16.8	24.2
Public welfare	.5	0	10.6	0	1.7
Health and hospitals	6.2	11.2	11.9	18.4	34.8
Other	3.1	4.9	8.6	50.6	27.0
TOTAL	23.3	31.9	57.6	85.8	87.7

SOURCE: Bureau of the Census, State Government Finances, 1962, 1967, 1972, 1977, and 1980 (Washington, D.C.: annually), GF-80, no. 3 (1981), Tables 7 and 11; Bureau of the Census, U.S. Census of Governments, 1977, vol. 4, Government Finances, no. 5, Compendium of Government Finances (Washington, D.C.: 1979), and similar census documents for 1972 (vol. 4, no. 5, Table 46), 1967 (vol. 4, no. 5, Table 29), and 1962 (vol. 4, no. 4, Table 46); and Bureau of the Census, Governmental Finances, 1979-80 (Washington, D.C.: 1981), GF-80, no. 5, Table 5.

a. Includes payments to institutions of higher education.

TABLE X-13. FEDERAL, STATE, AND LOCAL GOVERNMENT DIRECT GENERAL EXPENDITURES IN MICHIGAN AND THE UNITED STATES, FISCAL YEARS: 1960-1980

	Federal		State		Local		Total	
Fiscal year	Michigan	United States	Michigan	United States	Michigan	United States	Michigan	United States
1960	n.a.	n.a.	790	17,946	1,582	33,931	n.a.	n.a.
1961	n.a.	n.a.	903	19,004	1,721	37,197	n.a.	n.a.
1962	n.a.	n.a.	955	20,375	1,823	39,831	n.a.	n.a.
1963	n.a.	n.a.	972	22,491	1,974	42,324	n.a.	n.a.
1964	n.a.	n.a.	1,018	24,274	2,113	45,027	n.a.	n.a.
1965	n.a.	n.a.	1,054	26,141	2,229	48,813	n.a.	n.a.
1966	n.a.	n.a.	1,242	29,162	2,503	53,680	n.a.	n.a.
1967	n.a.	n.a.	1,553	34,249	2,771	59,101	n.a.	n.a.
1968	n.a.	n.a.	1,742	38,446	2,960	63,966	n.a.	n.a.
1969	n.a.	n.a.	1,929	43,244	3,459	73,483	n.a.	n.a.
1970	4,053	168,152	2,146	48,749	3,864	82,582	10,063	299,483
1971	4,531	182,702	2,481	56,478	4,329	94,196	11,341	333,376
1972	4,813	195,672	2,913	62,051	4,951	106,499	12,677	364,222
1973	5,452	221,354	3,280	67,264	5,302	113,822	14,034	402,440
1974	6,249	239,636	3,630	73,950	5,746	124,668	15,625	438,254
1975	7,538	279,672	4,269	86,326	6,636	143,148	18,443	509,146
1976	7,787	303,281	4,513	95,832	7,391	159,720	19,691	558,833
1977	9,466	333,212	4,801	101,891	7,723	170,938	21,990	606,041
1978	9,745	363,269	5,291	112,515	8,400	182,995	23,436	658,779
1979	10,928	394,582	5,938	124,559	9,446	201,470	26,312	720,611
1980	12,211	445,659	6,934	143,718	10,467	223,621	29,612	812,998

SOURCE: Bureau of the Census, *1977 Census of Governments, Compendium of Government Finances* (Washington, D.C.: 1979), vol. 4, no. 5, Table 3 and 47, and similar documents for 1957 (Table 24), 1962 (Table 25), 1967 (Table 23), and 1972 (Table 23); Bureau of the Census, *Governmental Finances, 1979-80* (Washington, D.C.: 1981), Table 6, and similar documents for other years between quinquennial Censuses of Governments; and Executive Office of the President, *Geographic Distribution of Federal Funds in Michigan, Fiscal Year 1980* (Washington, D.C.: 1981), National and State Summaries section, p. 2, and similar documents for previous years.

n.a.: not available.

TABLE X-12. TAXES AND INTERGOVERNMENTAL REVENUE AS DEFINED BY THE BUREAU OF THE CENSUS, MICHIGAN COUNTIES, MUNICIPALITIES, AND TOWNSHIPS, FISCAL YEARS: 1978 AND 1979

(Thousands of dollars)

	1978				1979			
	Counties	Munici-palities	Townships	Total	Counties	Munici-palities	Townships	Total
Taxes								
Property	344,413	616,925	92,195	1,053,533	387,012	649,275	102,913	1,139,200
Sales & gross receipts								
General	--	--	--	--	--	--	--	--
Selective	336	32,970	--	33,306	419	33,287	--	33,706
Individual income	--	203,051	--	203,051	--	220,416	--	220,416
All other	16,805	20,786	7,935	45,527	19,316	21,719	9,278	40,313
TOTAL	361,554	873,732	100,130	1,335,417	406,747	924,697	112,191	1,443,635
Intergovernmental revenue								
State								
Education	--	--	--	--	--	--	--	--
Public welfare	158,098	--	6	158,104	174,983	5	105	175,093
General support	71,480	327,525	80,844	479,849	85,850	378,154	84,843	548,488
Highway	242,978	111,797	515	355,190	268,569	126,530	368	395,467
TOTAL[a]	633,822	590,451	85,787	1,310,060	693,078	603,194	92,106	1,388,377
Federal government								
General revenue sharing	56,247	112,788	17,896	186,932	57,655	112,327	19,421	189,404
Housing and urban renewal	928	71,336	2,026	74,290	855	86,136	825	87,815
TOTAL[a]	225,890	530,135	38,111	794,136	81,611	180,595	6,609	268,815

SOURCE: Bureau of the Census, *Taxes and Intergovernmental Revenue of Counties, Municipalities and Townships: 1977-78*, Series GF-78, no. 9 (Washington, D.C.: May 1979), Table 3, and *Taxes and Intergovernmental Revenue of Counties, Municipalities and Townships: 1978-79*, Series GF-79, no. 9 (Washington, D.C.: May 1980), Table 3.

a. Includes amounts for categories not shown separately.

TABLE X-14. FEDERAL GOVERNMENT DISBURSEMENTS IN MICHIGAN AND THE UNITED STATES, BY FUNCTION, FISCAL YEAR: 1980

(Thousands of dollars)

Function	Michigan	United States	Michigan as a percentage of United States
Direct Federal Support			
Department of defense-military	2,330,238	127,180,634	1.8
Atomic energy defense activities	8,663	3,070,970	.3
Defense related activities	0	20,429	0
Foreign economic and financial assistance	13,247	1,221,296	1.1
Conduct of foreign affairs	521	417,346	.1
Foreign information & exchange activities	0	16,357	0
General science and basic research	26,629	1,470,720	1.8
Space flight	548	2,877,008	(a)
Space science applications & technology	8,916	1,507,110	.6
Supporting space activities	30	417,726	(a)
Energy	0	103	0
Energy supply	18,927	5,880,037	.3
Energy conservation	13,567	428,799	3.2
Emergency energy preparedness	0	350,835	0
Energy information, policy & regulation	956	711,440	.1
Water resources	33,253	5,815,724	.6
Conservation/land management	29,445	3,219,076	.9
Recreational resources	29,354	1,538,182	1.9
Pollution control/abatement	298,855	5,878,113	5.1
Other natural resources	10,210	1,472,111	.7
Farm income stabilization	148,114	8,770,716	1.7
Agricultural research/services	18,165	1,561,023	1.2
Mortgage credit & thrift insurance	30,622	2,161,763	1.4
Postal service	605,617	17,168,425	3.5
Other advancement and regulation of commerce	44,836	2,275,294	2.0
Ground transportation	313,893	14,766,303	2.1
Air transportation	52,923	3,523,761	1.5
Water transportation	33,427	2,286,043	1.5
Other transportation	923	154,959	.6
Community development	224,954	5,036,971	4.5
Area and regional development	36,684	2,702,883	1.4
Disaster relief and insurance	9,906	1,223,422	.8
Education, training, employment, social services	57,434	1,900,219	3.0
Elementary, secondary, & vocational education	195,661	5,824,492	3.4
Higher education	135,276	3,911,563	3.5

TABLE X-14. FEDERAL GOVERNMENT DISBURSEMENTS IN MICHIGAN AND THE UNITED STATES, BY FUNCTION, FISCAL YEAR: 1980 (cont.)

(Thousands of dollars)

Function	Michigan	United States	Michigan as a percentage of United States
Research/general education aids	19,915	808,345	2.4
Training & employment	511,335	10,894,856	4.7
Other labor services	6,028	506,765	1.2
Social services	133,530	4,375,110	3.1
Health	134,207	5,730,789	2.3
Health care services	2,215,897	53,130,610	4.2
Health research	0	223,250	0
Consumer & occupational health and safety	15,238	844,885	1.8
Income security	21,285	787,603	2.7
General retirement and disability insurance	5,061,861	125,572,843	4.0
Federal employment retirement & disability	209,166	15,220,122	1.4
Unemployment compensation	616,730	2,699,980	22.8
Public assistance & other income supplements	1,254,456	31,102,704	4.0
Income security for veterans	378,369	12,457,811	3.0
Veterans education, training, & rehabilitation	67,523	2,380,654	2.8
Hospital & medical care for veterans	159,494	6,617,061	2.4
Veterans housing	113	39,825	.3
Other veterans benefits/service	10,770	634,404	1.7
Federal law enforcement activities	28,464	1,395,815	2.0
Federal litigative & judicial activities	5,194	387,088	1.3
Federal correctional activities	6,524	302,910	2.2
Criminal justice assistance	18,656	520,778	3.6
Executive direction/management	0	79,991	0
Central fiscal operations	95,710	2,792,269	3.4
General property/records mangement	83,942	3,742,225	2.2
Central personnel management	809	173,690	.5
Other general government	1,411	668,314	.2
General revenue sharing	292,659	6,835,256	4.3
Other general purpose fiscal assistance	1,771	492,432	.4
Other interest	26,661	506,901	5.3
TOTAL	16,108,119	528,687,135	3.0

TABLE X-14. FEDERAL GOVERNMENT DISBURSEMENTS IN MICHIGAN AND THE UNITED STATES, BY FUNCTION, FISCAL YEAR: 1980 (cont.)

(Thousands of dollars)

Function	Michigan	United States	Michigan as a percentage of United States
Indirect Federal Support[b]			
Foreign economic and financial assistance	13,130	2,786,208	.5
Conduct of foreign affairs	1,333	582,240	.2
Foreign information and exchange activities	3,774	309,767	1.2
Energy supply	198,533	6,862,609	2.9
Energy Conservation	0	21	0
Energy Information, policy & Regulation	0	27	0
Farm income stabilization	140,503	6,427,919	2.2
Mortgage credit & thrift insurance	593,327	26,716,688	2.2
Other advancement & regulation of commerce	92,312	3,081,143	3.0
Water transportation	0	583,809	0
Area & regional development	70,336	2,070,261	3.4
Disaster relief & insurance	0	15,264	0
Higher education	22,055	670,033	3.3
Research & general education aids	427	47,680	.9
Public assistance & other income supplements	29,029	918,834	3.2
Veterans housing	278,917	15,278,825	1.8
General property & records management	36	11,938	.3
Interest on public debt	1,478,238	42,755,702	3.5

SOURCE: Community Services Administration, Geographic Distribution of Federal Funds in Michigan in 1980 (Washington D.C.: 1981), summary by functions.

a. Less than .05 percent.

b. These figures represent funds that do not directly affect geographic areas and are not included in any totals.

TABLE X-16. OUTLAYS BY THE DEPARTMENT OF DEFENSE IN MICHIGAN'S TOP TEN COUNTIES IN 1980, MICHIGAN AND THE UNITED STATES, BY TYPE OF OUTLAY, FISCAL YEARS: 1978, 1979, AND 1980.

		Procurement contracts				
		Military				
Area	Year	Goods ($000)	Services ($000)	RDTE[a] ($000)	Small[b] ($000)	Civil ($000)
Macomb	1978	362,872	63,240	405,605	38,134	337
	1979	732,242	74,118	70,905	45,983	262
	1980	793,885	108,307	53,361	37,124	135
Wayne	1978	98,509	12,059	2,888	4,089	3,087
	1979	94,354	11,775	2,025	1,656	3,846
	1980	123,223	11,213	1,588	1,780	1,864
Muskegon	1978	78,217	3,121	249	0	1,874
	1979	124,199	3,191	2,803	0	985
	1980	136,274	3,759	14,018	0	0
Oakland	1978	46,092	3,402	42,475	0	1,396
	1979	49,876	3,557	43,006	0	1,124
	1980	43,695	4,425	37,735	0	574
Marquette	1978	195	6,336	12	9,034	98
	1979	253	6,520	0	10,289	0
	1980	1,923	8,281	0	8,423	0
Kent	1978	72,360	3,197	3,475	0	235
	1979	53,381	2,953	1,737	0	50
	1980	39,567	8,648	10,726	0	159
Iosco	1978	1,237	3,371	0	6,614	0
	1979	1,406	4,441	0	8,174	0
	1980	1,480	5,723	0	5,936	0
Calhoun	1978	9,213	4,291	59	843	175
	1979	12,252	3,602	28	904	42
	1980	8,705	3,682	0	1,206	0
Jackson	1978	7,865	27	615	0	236
	1979	22,120	198	1,755	0	215
	1980	42,207	63	4,819	0	0
Washtenaw	1978	7,856	9,397	9,050	0	160
	1979	15,580	5,048	10,455	0	182
	1980	5,830	15,7[illegible]	8,992	0	128
Michigan	1978	785,171	114,639	472,288	61,789	34,811
	1979	1,214,102	134,789	138,856	70,423	39,354
	1980	1,365,144	176,645	134,544	58,002	7,645
United States	1978	34,590,668	9,781,912	8,638,736	5,432,180	1,691,650
	1979	35,150,124	10,766,501	8,521,584	5,934,487	1,470,257
	1980	43,671,623	12,411,051	9,418,512	6,522,253	1,784,315

SOURCE: Community Services Administration, Goegraphic Distribution of Federal Funds in Michigan, Fiscal Year 1980 (Washington, D.C.: 1981), FIXS 80-23, county summaries section, Michigan summary section, and U.S. summary section; and similar documents for 1978 and 1979.

TABLE X-16. OUTLAYS BY THE DEPARTMENT OF DEFENSE IN MICHIGAN'S TOP TEN COUNTIES IN 1980, MICHIGAN AND THE UNITED STATES, BY TYPE OF OUTLAY, FISCAL YEARS: 1978, 1979, AND 1980.

Pay					
Military					
Active duty ($000)	Reserve[c] ($000)	Retired ($000)	Civilian ($000)	Other[d] ($000)	Total ($000)
8,868	3,550	5,523	109,785	8,528	1,006,442
9,349	8,141	5,525	117,072	737	1,064,334
14,782	7,464	6,161	149,326	1,973	1,172,518
6,856	10,147	26,117	31,962	0	195,714
7,507	12,062	28,547	32,041	2,100	195,913
8,918	14,872	32,281	15,493	15,151	226,383
200	649	1,127	535	3	87,975
163	761	1,221	581	34	133,938
227	1,025	1,379	621	0	157,303
541	2,737	5,005	855	47	102,550
534	3,506	5,230	1,629	0	108,464
732	4,311	6,091	2,348	0	99,911
46,099	852	2,650	7,541	241	73,058
45,571	1,502	2,801	8,035	1,695	76,666
56,126	2,171	3,225	8,347	1,691	90,088
569	2,989	6,629	2,865	10	92,329
558	3,555	7,268	2,586	150	72,238
758	4,749	8,034	3,201	11	75,853
34,326	0	2,981	6,515	2,227	57,271
33,952	25	2,960	6,996	909	58,863
40,920	31	3,471	6,289	274	64,124
658	2,809	1,678	34,301	2	54,637
521	1,863	1,684	34,679	0	55,575
703	1,900	1,849	33,693	189	51,927
74	644	2,416	911	260	12,548
77	817	2,627	458	0	28,267
89	1,126	2,877	407	80	51,688
1,675	1,861	2,211	646	0	32,256
989	2,563	2,263	602	0	37,686
1,430	3,433	2,511	941	64	39,041
107,992	40,184	105,298	213,107	16,091	1,951,370
107,107	55,666	112,661	222,615	7,161	2,102,734
133,505	68,775	125,815	239,943	20,220	2,330,238
15,544,432	1,742,849	9,175,627	15,721,348	1,357,637	103,677,039
16,105,842	2,243,645	9,855,075	16,134,536	1,575,961	108,758,012
20,529,110	2,952,034	10,508,448	17,818,359	1,519,921	127,135,626

a. Research, development, test, and evaluation work.
b. Contracts of less than $10,000.
c. Includes National Guard.
d. Military prime construction contracts and civil defense grants.

TABLE X-17. FEDERAL OUTLAYS IN MICHIGAN, BY COUNTY, FISCAL YEARS: 1979 AND 1980

(In thousands of dollars)

	Department of defense[a]		Total[b]	
County	1979	1980	1979	1980
Alcona	1,427	1,111	17,890	19,945
Alger	174	210	15,752	15,917
Allegan	3,458	59	86,657	95,419
Alpena	2,152	1,950	48,170	50,905
Antrim	1,139	2,389	21,847	26,542
Arenac	575	3,228	18,956	32,036
Baraga	61	377	14,168	16,009
Barry	2,236	922	42,848	46,347
Bay	19,729	13,615	146,331	174,052
Benzie	1,553	304	17,130	18,900
Berrien	6,456	5,801	223,933	276,363
Branch	2,090	1,225	47,256	51,126
Calhoun	55,575	51,927	277,116	320,395
Cass	1,672	2,215	49,257	58,624
Charlevoix	4,296	4,418	27,718	32,195
Cheboygan	1,927	2,572	28,951	40,648
Chippewa	8,528	10,349	57,745	72,015
Clare	233	257	32,031	37,850
Clinton	4,776	7,103	88,831	139,516
Crawford	3,730	3,698	17,312	17,809
Delta	6,947	8,215	60,540	67,048
Dickinson	3,941	4,197	52,412	58,650
Eaton	3,140	4,448	55,710	80,584
Emmet	1,177	710	28,546	33,198
Genesee	14,856	17,019	485,193	593,090
Gladwin	209	227	23,189	27,832
Gogebic	810	706	36,459	40,839
Grand Traverse	4,478	6,042	67,430	81,738
Gratiot	729	14,317	47,401	69,227
Hillsdale	864	651	48,790	58,048
Houghton	3,196	4,279	61,898	71,051
Huron	3,533	3,902	52,902	63,452
Ingham	22,570	17,844	968,074	958,672
Ionia	590	675	51,085	58,490
Iosco	58,863	64,124	92,610	104,227

TABLE X-17. FEDERAL OUTLAYS IN MICHIGAN, BY COUNTY, FISCAL YEARS: 1979 AND 1980 (cont.)

(In thousands of dollars)

County	Department of defense[a] 1979	Department of defense[a] 1980	Total[b] 1979	Total[b] 1980
Iron	354	393	25,889	29,194
Isabella	541	627	46,941	50,694
Jackson	28,267	51,668	201,905	248,073
Kalamazoo	26,742	28,142	266,021	354,678
Kalkaska	74	107	10,781	15,582
Kent	72,238	75,853	555,568	652,354
Keweenaw	38	52	5,216	6,529
Lake	93	104	15,635	17,683
Lapeer	966	2,051	57,129	97,027
Leelanau	1,076	1,443	14,295	18,611
Lenawee	3,020	6,006	105,843	114,752
Livingston	860	1,315	54,925	69,130
Luce	91	112	9,453	11,807
Mackinac	205	230	15,428	19,493
Macomb	1,064,334	1,172,518	2,210,281	1,825,886
Manistee	916	1,152	30,806	36,026
Marquette	76,666	90,088	155,808	189,352
Mason	4,976	608	38,562	42,539
Mecosta	796	1,565	44,193	45,083
Menominee	601	663	32,567	40,549
Midland	1,715	4,307	59,959	75,887
Missaukee	190	101	12,098	12,705
Monroe	18,587	2,487	124,394	132,372
Montcalm	5,476	7,251	59,913	75,131
Montmorency	154	185	12,845	16,102
Muskegon	133,938	157,303	323,904	380,446
Newaygo	878	668	40,834	43,626
Oakland	108,464	99,911	979,890	1,160,171
Oceana	1,767	838	33,623	34,037
Ogemaw	5,386	6,927	27,501	37,182
Ontonagon	122	284	16,039	19,127
Osceola	1,057	280	25,467	28,521
Oscoda	47	61	9,695	11,408
Otsego	273	341	17,760	24,802
Ottawa	13,750	13,646	144,462	173,863

TABLE X-17. FEDERAL OUTLAYS IN MICHIGAN, BY COUNTY, FISCAL YEARS: 1979 AND 1980 (cont.)

(In thousands of dollars)

	Department of defense[a]		Total[b]	
County	1979	1980	1979	1980
Presque Isle	125	4,628	19,990	36,133
Roscommon	248	275	27,765	32,628
Saginaw	9,165	9,044	321,000	383,984
St. Clair	5,922	18,060	157,760	215,296
St. Joseph	2,142	1,956	65,411	73,470
Sanilac	6,882	492	60,179	60,824
Schoolcraft	472	580	16,142	17,970
Shiawassee	1,013	1,033	63,270	76,850
Tuscola	752	1,124	56,957	71,410
Van Buren	2,236	1,066	92,686	103,837
Washtenaw	37,686	39,041	411,147	464,175
Wayne	195,913	226,383	2,785,255	4,491,157
Wexford	17,828	21,771	50,885	61,154
TOTAL	2,102,734	2,330,238	14,327,799	16,108,119

SOURCE: Community Services Administration, *Geographic Distribution of Federal Funds in Michigan in 1980* (Washington, D.C.: 1981), county summaries section; and similar document for 1979.

[a] Dollar outlays by the executive branch only, excludes the judiciary and legislative. Totals include civilian and military pay, contracts, grants, and transfer payments such as Social Security and veterans benefits to individuals and revenue sharing to state and local governments. Most government contracts are reported as obligations or funds legally set aside to be spent, not actual expenditures. Expenditures may take place over a period of years. Also, contracts reflect the location of the prime contractor and are not adjusted to allow for subcontracting.

[b] Includes military and civilian payrolls, military retirement pay, and prime contracts for military and civilian functions of the Department of Defense, such as contracts by the U.S. Army Corps of Engineers.

TABLE X-18. EXPENDITURES OF MICHIGAN LOCAL GOVERNMENTS AS DEFINED BY THE BUREAU OF THE CENSUS, FISCAL YEARS: 1962, 1967, 1972, 1977, AND 1980

(In millions of dollars)

Item	1962	1967	1972	1977	1980
General expenditure	1,835.1	2,856.6	5,046.2	7,744.1	10,467.4
Intergovernmental, net	12.6	85.8	95.0	20.7	19.8
Direct expenditure	1,822.6	2,770.8	4,951.3	7,723.4	11,430.0
Education	857.2	1,452.6	2,396.6	3,622.6	4,708.6
Higher	10.2	73.8	100.1	238.6	304.2
Capital outlay	2.2	37.2	13.7	n.a.	148.1
Other	8.0	36.6	86.4	n.a.	156.1
Local schools	847.3	1,378.7	2,296.5	3,384.0	4,404.4
Capital outlay	157.8	224.6	226.7	n.a.	1,433.3
Other	689.5	1,154.1	2,069.8	n.a.	2,971.1
Highways	180.6	230.0	351.3	507.5	707.2
Capital outlay	83.9	95.9	159.8	193.8	255.1
Other	96.7	134.1	191.5	313.7	452.1
Public welfare	83.6	92.1	141.6	229.3	205.3
Hospitals	114.5	153.9	256.2	415.8	835.5[a]
Capital outlay	8.1	8.2	12.9	n.a.	423.2[a]
Other	106.4	145.6	243.3	n.a.	412.3[a]
Health	14.6	21.3	67.5	177.7	--
Police protection	80.9	116.5	245.0	425.6	588.0
Fire protection	46.6	67.0	107.9	184.1	239.9
Sewerage	66.6	73.6	316.8	291.5	644.6
Capital outlay	50.1	43.7	245.2	161.6	n.a.
Other	16.5	29.8	71.5	129.9	n.a.
Other sanitation	31.2	41.6	67.8	92.7	132.0
Parks and recreation	38.3	57.0	87.1	153.3	343.3[c]
Urban renewal[b]	44.1	39.9	81.1	89.0	148.5
Airports	5.0	31.4	26.5	48.7	54.6
Correction	14.3	13.9	32.3	67.8	95.8
Libraries	15.8	22.2	28.7	41.9	57.7
Financial administration	20.1	30.9	60.2	97.6	186.1
General control	48.7	67.0	139.6	232.6	315.1
General public buildings	17.4	28.9	39.1	69.6	106.0
Interest on general debt	56.7	92.4	201.6	298.5	377.5
Other	86.1	105.4	304.3	677.7	649.5
Utility expenditure	136.6	215.1	334.1	513.0	759.4
Water supply	83.3	141.0	210.7	263.9	n.a.
Electric power	29.3	43.1	71.3	126.8	n.a.
Transit	23.9	31.0	52.1	122.3	n.a.
Insurance trust expenditure, Employee retirement	42.4	61.3	97.9	153.4	203.2
TOTAL	2,014.1	3,133.0	5,478.3	8,410.5	11,449.8

SOURCE: Bureau of the Census, U.S. Census of Governments, 1977, vol. 4, Government Finances, no. 5, Compendium of Government Finances (Washington, D.C.: 1969), Table 47, and similar census documents for 1962 (Table 46), 1967 (Table 46), and 1972 (Table 46); and Bureau of the Census, Government Finances, 1979-80 (Washington, D.C.: 1980), Series GF-80, no. 5, Table 12.

a. Includes health.

b. Includes housing

c. Includes natural resources

n.a.: not available.

TABLE X-19. EXPENDITURES OF THE STATE OF MICHIGAN AS DEFINED BY THE BUREAU OF THE CENSUS, FISCAL YEARS: 1962, 1967, 1972, 1977, AND 1980

(In millions of dollars)

Item	1962	1967	1972	1977	1980
General expenditure	1,565.2	2,531.3	4,532.0	7,649.3	10,512.8
Intergovernmental, net	609.7	978.6	1,619.1	2,848.3	3,578.3
Direct expenditure	955.5	1,552.7	2,912.9	4,800.9	6,934.4
Education	257.7	612.4	867.4	1,296.6	1,734.2
Higher	246.6	541.2	714.5	1,038.2	1,426.6
Capital outlay	40.0	118.1	67.5	58.7	116.9
Other	206.6	423.1	647.0	979.5	1,309.7
Other	11.1	71.2	152.9	258.4	307.7
Highways	305.7	285.6	344.5	392.0	556.2
Capital outlay	285.9	260.3	316.3	329.3	471.3
Other	19.8	25.2	28.3	62.7	84.9
Public welfare	107.0	234.7	948.4	1,767.8	2,500.2
Hospitals	90.4	142.1	218.6	339.4	523.9
Capital outlay	6.6	14.1	4.7	22.1	39.3
Other	83.8	128.0	213.9	317.3	484.6
Health	16.8	26.0	44.0	126.1	369.2
Police protection	12.5	19.4	38.5	65.6	110.5
Natural resources	31.9	47.0	83.9	91.8	130.0
Capital outlay	1.4	4.3	17.1	n.a.	n.a.
Other	30.5	42.7	66.8	n.a.	n.a.
Urban renewal	0	0	1.9[a]	4.2[a]	8.2[a]
Airports	4.7	2.7	6.9	13.5	22.8
Correction	23.0	31.3	50.7	119.2	188.1
Employment Security Administration	17.5	22.9	55.2	99.1	134.0
Financial administration	17.2	23.7	46.4	80.9	106.4
General control	9.2	16.8	40.1	73.5	109.8
Interest on general debt	27.8	32.3	57.1	105.1	192.1[b]
Other	34.0	55.8	109.2	226.0	224.6
Liquor store expenditure	132.5	187.9	247.7	280.2	342.1
Insurance trust expenditure	167.5	172.8	370.6	1.141.3	1,778.8
Unemployment compensation	134.8	111.4	260.0	842.1	1,416.6
Employee retirement	27.6	51.1	96.2	269.9	286.4
Other	5.1	10.3	14.4	29.2	75.9
TOTAL	1,865.2	2,892.0	5,150.3	9,070.8	12,633.6

SOURCE: Bureau of the Census, U.S. Census of Governments, 1977, vol. 4, Government Finances, no. 5, Compendium of Government Finances (Washington, D.C.: 1969), Table 47, and similar census documents for 1962 (Table 46), 1972 (Table 46); and 1967 (Table 46); and Bureau of the Census, State Government Finances, 1980 (Washington, D.C.: 1981), Series GF-80, no. 3, Table 9.

a. Includes housing.

b. Includes interest on nongovernmental debt of state agencies, such as toll highway revenue bonds, pollution control bonds, and industrial development bonds.

n.a.: not available.

TABLE X-20. EXPENDITURE OF THE STATE OF MICHIGAN, AS DEFINED BY THE STATE OF MICHIGAN (INCLUDING PAYMENTS FROM THE GENERAL FUND TO INSTITUTIONS OF HIGHER EDUCATION), FISCAL YEARS: 1978-1980

(In thousands of dollars)

Branch and department	1978 expenditures	1979 expenditures	1980 expenditures
General Fund			
Executive	$ 1,854	$ 1,966	$ 2,229
Legislative	40,191	38,982	43,397
Judicial	29,528	32,431	33.919
Management and budget	80,868	102,418	112,643
Attorney General	12,047	15,154	16,897
Civil rights	7,226	8,280	9,172
Civil service	9,435	10,716	12,956
State	51,852	57,178	66,868
Treasury	36,052	41,155	44,971
Colleges and universities	646,232	732,990	783,656
Other education	1,108,872	1,307,180	1,377,531
Public health	125,149	151,347	180,367
Mental health	390,287	476,496	573,564
Social services	2,247,372	2,413,800	2,855,279
Corrections	136,546	152,356	176,289
Military affairs	9,571	11,601	12,493
State police	98,474	112,672	127,367
Commerce	64,409	79,738	85,581
Labor	112,213	117,103	137,905
Licensing and regulation	6,806	7,947	8,305
Natural resources	101,156	112,672	117,043
Agriculture	37,948	35,199	31,995
Expenditures not assigned	753,749	834,463	752,882
TOTAL	6,107,850	6,853,855	7,563,326
State aeronautics fund	19,666	18,662	24,173
State trunkline fund	381,134	443,055	516,865
Motor vehicle highway fund	629,116	712,112	735,875
Comprehensive transportation fund	56,240	79,437	108,898
Game and fish protection fund	22,697	26,585	26,635
Michigan state waterways fund	6,089	7,219	10,721
Marine safety fund	2,252	2,447	2,491
State park improvement fund	1,633	4,366	4,572
State recreational land acquisition trust fund	31	1,294	4,693
Michigan employment security act, admin. fund	96,349	93,905	132,159
Michigan veterans' benefit (trust) fund	2,836	3,483	3,371
School aid fund	1,654,028	1,899,280	1,933,474
Motor vehicle accident claims fund	5,689	7,422	8,449
State lottery fund	331,804	416,871	489,585
State campaign fund	2,867	2,340	n.a.
TOTAL	9,320,290	10,129,278	11,565,287

SOURCE: Michigan Department of Management and Budget, State of Michigan Financial Report, 1978, 1979, and 1980 (Lansing: annually), pp. 101-102.

n.a.: not available

TABLE X- 15. NFT VALUE OF MILITARY PRIME CONTRACT AWARDS OVER $10,000 IN MICHIGAN, BY PROCUREMENT PROGRAM, FISCAL YEARS: 1978-1980

Procurement program	1978 Value ($000)	1978 Percentage of U.S. Total	1979 Value ($000)	1979 Percentage of U.S. Total	1980 Value ($000)	1980 Percentage of U.S. Total
Airframes & related assemblies & spares	13,620	.2	14,456	.2	14,033	.2
Aircraft engines & related spares	50,231	1.6	49,805	1.5	50,665	1.3
Other aircraft equipment & supplies	60,572	3.2	52,103	2.3	54,929	1.8
Missile & space systems	55,162	.7	56,661	.7	17,160	.2
Ships	15,774	.3	9,500	.1	15,657	.3
Combat vehicles	874,620	56.9	942,987	58.2	1,077,353	48.3
Noncombat vehicles	64,563	10.3	79,526	11.5	60,390	11.1
Weapons	9,677	1.0	52,572	5.1	64,061	4.8
Ammunition	804	(a)	[illegible],834	.2	16,142	.3
Electronics & communication equipment	45,388	.6	43,943	.5	81,656	.8
Petroleum	29,857	1.2	32,384	1.2	45,646	1.1
Other fuels & lubricants	14	(a)				
Textiles, clothing, & equipage	1,475	.2	1,680	.3	9,753	1.2
Military building supplies	730	.9	176	.3	48	.1
Subsistence	18,621	1.6	22,383	1.7	33,421	2.5
Transportation equipment	34	3.3	67	6.3	14	.2
Production equipment	10,133	6.7	3,660	2.2	1,994	1.0
Construction	21,700	.9	20,793	.7	38,892	.9
Construction equipment	15,395	14.0	8,493	13.2	8,804	7.8
Medical & dental supplies & equipment	6,643	2.9	6,718	2.7	10,672	3.9
Photographic equipment & supplies			171	.2	139	.2
Materials handling equipment	8,014	6.0	13,477	11.6	8,711	9.1
All other supplies & equipment	33,400	2.1	35,083	1.7	47,020	1.8
Services	45,713	.9	43,120	.9	54,589	.8
TOTAL	1,382,180	2.6	1,493,592	2.6	1,701,749	2.5

SOURCE: Department of Defense, Military Prime Contract Awards by Region and State, Fiscal Years 1978, 1979, and 1980 (Washington, D.C.: 1981), Table III.

a. Less than .05 percent.

TABLE X-21. STATE EQUALIZED VALUE BY STATE TAX COMMISSION, BY COUNTY: 1980 AND 1981

County	Real property		Personal property	
	1980	1981	1980	1981
Alcona	175,501,482	$ 188,730,114	$ 6,008,500	$ 6,160,050
Alger	71,251,712	83,370,545	9,322,481	9,565,079
Allegan	590,228,086	667,446,688	91,660,598	97,987,631
Alpena	269,290,481	294,983,422	42,324,059	44,465,736
Antrim[a]	256,520,501	290,132,638	11,779,794	12,283,316
Arenac	144,728,497	165,554,383	9,211,231	9,570,555
Baraga	52,981,178	57,271,596	6,693,000	6,459,850
Barry	315,880,116	354,344,894	22,737,518	24,074,373
Bay	1,137,434,584	1,231,709,707	113,044,600	109,656,350
Benzie	142,848,338	158,089,154	6,932,125	7,166,465
Berrien[a]	1,451,914,101	1,606,813,226	224,513,314	212,978,105
Branch	310,732,993	345,462,724	25,678,216	27,342,011
Calhoun	895,144,732	966,956,700	143,289,861	147,639,865
Cass	386,231,425	446,441,732	34,516,513	34,763,603
Charlevoix	277,850,088	310,901,156	23,884,600	24,427,850
Cheboygan	224,377,722	246,128,125	19,740,441	20,193,567
Chippewa	197,928,554	226,644,818	18,361,078	19,038,043
Clare	221,152,556	241,078,361	41,959,063	44,598,217
Clinton	440,826,983	497,658,585	29,839,108	34,280,919
Crawford	118,421,375	130,417,200	10,458,240	11,210,968
Delta	240,314,099	261,143,323	53,375,883	58,737,146
Dickinson	173,472,971	199,963,416	23,011,803	23,862,490
Eaton	686,711,095	767,163,407	57,088,626	58,677,981
Emmet	299,350,393	326,586,136	32,531,261	34,644,586
Genesee	3,226,791,130	3,551,151,640	549,153,286	573,049,050

TABLE X-21. STATE EQUALIZED VALUE BY STATE TAX COMMISSION, BY COUNTY: 1980 AND 1981 (cont.)

County	Real property		Personal property	
	1980	1981	1980	1981
Gladwin	$ 184,949,683	$ 205,518,123	$ 10,517,359	$ 12,249,427
Gogebic	105,272,902	114,744,349	21,415,410	22,101,308
Grand Traverse	597,925,019	682,809,020	66,292,917	71,567,071
Gratiot	297,582,845	335,876,265	35,737,700	37,358,663
Hillsdale[a]	368,042,868	402,366,404	22,660,225	24,785,737
Houghton	165,212,394	187,505,551	29,848,452	28,870,581
Huron[a]	549,036,894	592,637,395	29,683,648	31,337,888
Ingham	1,742,296,654	1,958,481,969	285,612,150	293,863,418
Ionia	309,908,780	347,934,790	26,898,140	29,896,410
Iosco	257,203,189	272,542,657	19,984,080	20,452,744
Iron	108,511,603	126,231,913	19,852,560	18,774,893
Isabella	317,985,388	347,994,353	30,721,734	31,338,475
Jackson[a]	954,976,653	1,042,067,099	148,063,603	153,051,808
Kalamazoo	1,587,012,588	1,775,397,184	220,874,537	242,079,331
Kalkaska	132,935,452	148,066,012	47,792,485	65,604,624
Kent[a]	3,073,096,396	3,546,456,410	423,828,382	474,832,922
Keweenaw	23,373,109	24,289,992	3,848,073	3,915,801
Lake	121,866,821	137,761,084	4,963,382	5,234,628
Lapeer	562,210,368	630,628,294	42,184,349	44,559,185
Leelanau	281,758,055	327,197,515	8,533,327	9,662,072
Lenawee	785,749,308	860,260,905	82,785,676	88,696,901
Livingston[a]	970,362,019	1,090,569,044	85,163,961	95,819,308
Luce	45,058,061	48,837,718	1,753,514	1,956,299
Mackinac	134,980,883	143,558,875	26,146,729	28,570,790
Macomb	5,838,286,232	6,521,307,570	756,282,281	795,823,638

TABLE X-21. STATE EQUALIZED VALUE BY STATE TAX COMMISSION, BY COUNTY: 1980 AND 1981 (cont.)

County	Real property		Personal property	
	1980	1981	1980	1981
Manistee	$ 199,169,098	$ 219,808,502	$ 54,315,238	$ 62,649,753
Marquette[a]	568,287,558	596,525,176	55,525,947	54,347,078
Mason	387,813,577	459,730,209	41,214,364	43,221,526
Mecosta	253,476,848	281,652,182	35,704,845	39,941,045
Menominee	174,133,283	192,582,930	14,811,221	14,952,355
Midland	720,266,365	798,218,269	439,397,953	469,993,782
Missaukee	107,441,112	122,089,997	15,727,591	17,742,385
Monroe	1,386,063,268	1,619,682,797	151,995,055	151,729,871
Montcalm[a]	324,359,886	365,442,741	47,785,388	50,416,489
Montmorency[a]	114,767,952	123,181,007	4,705,577	4772,117
Muskegon[b]	929,775,950	1,060,805,962	111,323,413	132,250,963
Newaygo	286,011,840	322,112,602	26,156,170	28,355,826
Oakland	10,614,279,649	12,129,752,472	1,037,173,633	1,118,074,387
Oceana	185,400,117	215,477,590	11,056,558	11,642,960
Ogemaw	183,600,106	196,453,185	15,941,138	16,850,528
Ontonagon	81,042,170	86,725,260	9,955,222	11,553,017
Osceola[b]	173,742,866	186,315,233	38,809,324	38,138,928
Oscoda	89,773,991	99,247,551	6,290,677	6,560,033
Otsego	217,459,349	235,857,467	36,514,350	49,038,635
Ottawa	1,251,308,521	1,609,163,623	204,023,739	136,765,866
Presque Isle	158,773,824	170,711,696	18,073,790	19,688,077
Roscommon	253,821,404	272,402,513	15,410,750	16,987,733
Saginaw	1,691,019,560	1,893,423,481	268,910,398	285,186,259
St. Clair	1,345,731,379	1,675,220,931	211,294,053	216,588,245
St. Joseph	441,839,189	506,741,948	57,626,617	56,764,261

TABLE X-21. STATE EQUALIZED VALUE BY STATE TAX COMMISSION, BY COUNTY: 1980 AND 1981 (cont.)

County	Real property 1980	Real property 1981	Personal property 1980	Personal property 1981
Sanilac	$ 436,347,696	$ 467,916,260	$ 20,876,666	$ 25,120,397
Schoolcraft[a]	69,131,570	74,019,102	12,122,766	12,535,575
Shiawassee	474,829,870	534,998,070	37,834,597	40,412,339
Tuscola[a]	480,959,377	538,065,933	34,914,265	35,766,760
Van Buren	482,058,194	523,548,662	56,618,463	59,236,845
Washtenaw	2,402,798,041	2,758,711,227	327,612,431	347,771,755
Wayne	13,994,278,660	15,448,748,629	2,630,285,290	2,684,371,490
Wexford	196,989,872	219,822,887	20,563,214	22,120,512
TOTAL	72,500,231,498	219,822,887	10,145,818,467	22,120,512

SOURCE: Michigan State Tax Commission, special release.

a. Counties for which the county equalized valuation was not adopted by the State Tax Commission.

b. Amended to recognize county equalization petition and stipulation filed with Michigan Tax Tribunal prior to May 26, 1981.

TABLE X-22. STATE EQUALIZED VALUATIONS AND PROPERTY TAX LEVIES IN MICHIGAN CITIES: 1980

City	State equalized valuation	County taxes	City taxes	School taxes	Total	
					Rate[a]	Taxes
Adrian	$140,901,100	$ 801,755	$ 2,113,517	$ 5,490,522	59.66	$ 8,405,794
Albion	49,724,821	278,956	679,226	1,977,059	59.03	2,935,241
Algonac	30,748,077	189,715	489,510	1,006,332	54.82	1,685,557
Allegan	33,899,300	200,667	406,792	865,622	43.45	1,473,081
Allen Park	348,678,904	2,726,669	5,406,171	14,172,272	63.97	22,305,112
Alma	59,203,274	335,381	908,850	2,412,729	61.77	3,656,960
Alpena	132,634,794	927,045	2,647,440	4,318,621	59.51	7,893,106
Ann Arbor	1,009,513,900	6,198,674	17,224,985	42,217,064	65.02	65,640,722
Au Gres	7,690,804	45,202	129,241	186,347	46.91	360,791
Auburn	14,879,600	100,671	146,721	581,953	55.74	829,345
Bad Axe	25,247,729	113,615	270,656	579,738	38.18	964,009
Bangor	9,506,057	61,631	141,146	297,990	53.73	510,767
Battle Creek	242,243,785	1,358,988	3,909,330	10,245,629	64.04	15,513,946
Bay City	278,226,090	1,882,394	7,601,138	10,756,443	72.75	20,239,976
Beaverton	6,192,328	47,966	117,655	185,378	56.68	350,999
Belding	27,804,400	130,375	401,995	836,857	49.24	1,369,227
Belleville	21,799,703	170,474	379,316	848,008	64.12	1,397,799
Benton Harbor	48,616,767	268,121	1,541,151	1,716,741	72.53	3,526,014
Berkley	124,230,600	645,154	2,406,559	5,514,412	68.95	8,566,125
Bessemer	10,357,310	81,926	187,571	372,967	62.03	642,464
Big Rapids	47,624,700	312,770	276,223	1,548,041	44.87	2,137,035
Birmingham	356,912,950	1,853,520	5,313,018	12,392,339	54.80	19,558,877
Bloomfield Hills	149,739,350	777,626	1,714,850	4,978,893	49.90	7,371,370
Boyne City	24,093,450	109,625	460,185	840,555	58.54	1,410,366
Bridgman	21,445,815	118,274	353,856	225,567	32.53	697,697

TABLE X-22. STATE EQUALIZED VALUATIONS AND PROPERTY TAX LEVIES IN MICHIGAN CITIES: 1980 (cont.)

City	State equalized valuation	County taxes	City taxes	School taxes	Total	
					Rate[a]	Taxes
Brighton	50,170,970	251,260	815,278	2,044,306	62.00	3,110,844
Bronson	13,581,296	93,173	207,115	396,903	51.33	697,190
Brown City	7,526,947	35,381	127,960	223,687	51.42	387,027
Buchanan	38,020,213	209,681	532,283	1,309,986	53.97	2,051,951
Burton	241,655,111	1,602,179	1,957,643	9,107,264	52.42	12,667,086
Cadillac	68,601,303	504,686	1,367,910	2,303,728	60.88	4,176,334
Carson City	6,981,149	34,129	125,661	227,801	55.52	387,591
Caspian	4,455,150	33,126	95,080	121,959	56.15	250,166
Cedar Springs	11,284,500	54,166	157,983	364,812	51.13	576,961
Center Line	93,276,088	451,979	1,748,927	3,992,072	66.39	6,192,977
Charlevoix	43,459,700	197,742	521,516	1,258,606	45.51	1,977,864
Charlotte	56,790,759	312,251	1,052,031	1,855,320	56.69	3,219,702
Cheboygan	35,793,000	205,452	787,446	947,083	54.20	1,939,981
Clare	26,432,166	145,378	449,347	922,947	57.42	1,517,671
Clawson	127,208,137	660,617	1,452,998	5,212,570	57.59	7,326,185
Clio	15,230,350	100,977	228,457	505,754	54.84	835,188
Coldwater	67,819,015	465,266	973,203	2,283,724	54.88	3,722,192
Coleman	5,306,771	22,819	106,091	205,581	63.03	334,491
Coloma	12,054,300	66,479	192,869	436,305	57.71	695,654
Cooperville	17,831,050	76,859	276,381	492,743	47.44	845,983
Corunna	19,020,241	129,433	326,232	606,765	55.86	1,062,430
Croswell	15,166,500	71,283	317,741	408,291	52.57	797,315
Crystal Falls	9,505,000	70,674	135,875	287,801	52.00	494,260
Davison	37,228,393	246,825	437,434	1,410,251	56.26	2,094,510
Dearborn	1,614,066,802	12,622,002	25,308,571	44,749,652	51.22	82,680,225

TABLE X-22. STATE EQUALIZED VALUATIONS AND PROPERTY TAX LEVIES IN MICHIGAN CITIES: 1980 (cont.)

City	State equalized valuation	County taxes	City taxes	School taxes	Total	
					Rate[a]	Taxes
Dearborn Heights	514,125,638	4,020,462	7,930,976	19,352,329	60.89	21,303,768
Detroit	5,211,257,166	40,752,031	176,447,923	201,362,977	80.32	418,562,931
DeWitt	21,491,934	114,894	286,702	865,884	58.97	1,267,480
Dowagiac	33,072,712	207,105	608,538	977,348	54.21	1,792,991
Durand	21,780,158	148,214	380,717	747,517	58.61	1,276,448
East Detroit	262,937,730	1,274,091	4,602,689	11,324,469	65.42	17,201,249
East Grand Rapids	112,482,400	539,916	1,855,960	4,739,266	63.43	7,135,141
East Jordan	15,079,225	68,610	260,117	528,381	56.84	857,108
East Lansing	218,891,620	1,822,929	3,841,548	10,714,747	74,83	16,379,224
East Tawas	21,282,400	110,668	308,595	484,175	42.45	903,438
Eaton Rapids	27,440,687	150,924	384,170	960,232	54.49	1,495,326
Ecorse	226,440,687	1,771,159	5,016776	6,921,964	60.53	13,709,900
Escanaba	91,028,100	496,103	1,410,949	3,239,690	56.54	5,146,743
Essexville	35,771,788	242,022	508,317	630,811	38.61	1,381,149
Evart	14,603,269	80,318	198,020	424,835	48.15	703,174
Farmington	130,047,850	675,364	1,463,046	5,163,017	56.14	7,301,427
Farmington Hills	741,665,315	3,851,616	6,304,158	29,550,440	53.54	39,706,215
Fennville	6,947,267	41,124	89,072	198,700	47.34	328,897
Fenton	71,327,417	472,901	1,115,932	2,792,622	61.43	4,381,454
Ferndale	171,635,450	891,337	4,131,424	7,838,486	74.93	12,861,247
Ferrysburg	25,518,320	109,994	115,950	842,477	45.79	1,168,421
Flat Rock	144,117,708	1,127,000	2,017,650	5,150,224	57.56	8,294,874
Flint	1,392,272,990	9,230,770	11,996,689	61,159,749	59.17	82,387,208
Flushing	70,363,683	466,512	574,490	2,482,501	50.08	3,523,503
Frankenmuth	48,548,100	284,492	485,482	1,455,472	45.84	2,225,446

TABLE X-22. STATE EQUALIZED VALUATIONS AND PROPERTY TAX LEVIES IN MICHIGAN CITIES: 1980 (cont.)

City	State equalized valuation	County taxes	City taxes	School taxes	Total Rate[a]	Total Taxes
Frankfort	13,220,200	76,258	240,608	334,701	49.29	651,567
Fraser	144,403,875	699,723	2,453,422	6,559,662	67.26	9,712,807
Fremont	38,406,637	210,276	499,286	1,313,288	52.67	2,022,851
Gaastra	1,312,870	9,777	30,242	35,994	57.81	76,013
Galesburg	9,003,725	54,022	88,417	359,843	55.79	502,282
Garden City	220,838,158	1,726,954	3,587,255	9,978,837	69.25	15,293,046
Gaylord	34,720,111	149,296	392,299	879,808	40.94	1,421,403
Gibraltar	59,048,021	461,756	1,151,438	2,559,141	70.66	4,172,335
Gladstone	24,235,456	132,083	413,004	854,712	57.72	1,398,799
Gladwin	16,015,456	124,057	303,472	402,988	58.10	930,517
Gobles	3,697,494	23,982	73,950	101,878	54.06	199,900
Grand Blanc	72,818,666	482,788	701,972	2,745,993	53,98	3,930,752
Grand Haven	105,344,350	454,076	1,445,396	3,477,902	53.98	5,377,374
Grand Ledge	39,336,563	216,352	632,925	1,575,905	61.65	2,425,182
Grand Rapids	1,180,809,725	5,667,887	10,801,103	40,449,627	48.20	56,918,626
Grandville	108,945,200	522,937	980,507	3,772,125	48.42	5,275,569
Grant	4,532,913	24,819	49,748	136,934	46.70	211,700
Grayling	17,618,600	135,839	255,470	540,010	52.86	931,319
Greenville	57,418,300	280,707	803,861	1,810,973	50.43	2,875,541
Grosse Pointe	95,528,888	747,036	1,892,314	3,438,199	63.62	6,077,549
Grosse Pte Farms	195,619,668	1,529,746	3,151,201	7,040,587	59.92	11,721,533
Grosse Pte Park	142,714,077	1,116,024	2,641,470	5,136,451	62.32	8,893,945
Grosse Pte Woods	254,981,605	1,993,964	3,793,889	9,176,128	58.69	14,963,982
Hamtramck	111,798,008	874,260	3,214,193	3,990,081	72.26	8,078,524
Hancock	27,309,436	193,157	403,905	759,702	49.68	1,356,764

TABLE X-22. STATE EQUALIZED VALUATIONS AND PROPERTY TAX LEVIES IN MICHIGAN CITIES: 1980 (cont.)

City	State equalized valuation	County taxes	City taxes	School taxes	Total	
					Rate[a]	Taxes
Harbor Beach	25,802,367	116,111	464,443	596,809	45.63	1,177,362
Harbor Springs	23,209,410	134,580	247,813	536,819	39.61	919,212
Harper Woods	162,289,320	1,269,102	3,848,856	4,816,981	61.22	9,934,849
Harrison	14,590,900	80,250	201,793	434,167	49.09	716,210
Harrisville	4,873,500	25,586	37,770	112,042	35.99	175,397
Hart	12,084,145	61,375	142,595	336,191	44.70	540,161
Hartford	10,072,871	65,305	223,746	381,003	66.52	670,054
Hastings	48,668,100	277,282	763,122	1,478,756	51.76	2,519,159
Hazel Park	116,653,300	605,804	2,974,659	4,953,204	73.15	8,533,667
Highland Park	146,573,982	1,146,209	4,070,370	6,686,948	81.21	11,903,527
Hillsdale	49,606,678	235,633	843,320	1,600,831	54.02	2,679,784
Holland	225,313,700	1,069,346	3,606,529	8,693,713	59.34	13,369,588
Houghton	22,793,111	161,213	384,002	717,983	55.42	1,263,199
Howell	60,604,884	303,515	1,030,283	2,311,610	60.15	3,645,408
Hudson	16,372,750	93,164	188,387	540,250	50.19	821,701
Hudsonville	32,626,745	140,634	228,387	997,631	41.89	1,366,653
Huntington Woods	74,341,000	386,068	1,548,376	3,278,602	70.12	5,213,046
Imlay City	20,518,107	110,818	268,881	665,804	50.96	1,045,503
Inkster	144,384,560	1,129,087	3,682,212	6,204,277	76.30	11,016,576
Ionia	32,174,000	150,864	498,697	840,924	46.33	1,490,486
Iron Mountain	58,032,112	455,929	1,174,637	2,045,858	63.35	3,676,424
Iron River	15,252,788	113,412	348,528	417,544	57.66	879,484
Ironwood	33,040,700	261,352	839,234	1,074,153	65.82	2,174,739
Ishpeming	49,784,900	311,509	1,110,203	1,803,787	64.79	3,225,499
Ithaca	16,319,008	92,446	252,846	531,309	53.72	876,601

TABLE X-22. STATE EQUALIZED VALUATIONS AND PROPERTY TAX LEVIES IN MICHIGAN CITIES: 1980 (cont.)

City	State equalized valuation	County taxes	City taxes	School taxes	Total Rate[a]	Total Taxes
Jackson	258,740,774	1,709,248	3,639,160	11,491,709	65.43	16,929,137
Kalamazoo	537,186,725	3,223,120	10,093,739	22,355,703	66.41	35,672,562
Keego Harbor	18,561,200	96,392	353,520	698,562	61.87	1,148,474
Kentwood	288,027,500	1,382,432	1,724,282	10,041,778	45.65	13,148,592
Kingsford	45,003,670	353,571	823,567	1,301,056	55.07	2,478,195
Laingsburg	4,895,890	33,317	117,537	148,644	61.17	299,498
Lake City	7,407,209	37,036	101,946	205,135	46.46	344,117
Lansing	961,393,225	7,961,610	11,662,491	40,641,625	62.69	60,265,726
Lapeer	48,471,050	261,792	533,182	1,630,726	50.04	2,425,700
Lathrup Village	59,888,240	311,012	815,682	2,274,609	56.79	3,401,303
Leslie	10,983,217	91,468	145,412	416,042	60.46	664,022
Lincoln Park	278,413,763	2,177,196	5,296,271	9,273,127	60.15	16,746,594
Litchfield	11,589,382	55,050	118,028	380,485	47.76	553,562,94
Livonia	1,345,555,607	10,522,245	16,999,968	55,451,389	61.66	82,973,602
Lowell	25,056,300	120,720	313,214	896,153	53.07	1,329,628
Ludington	69,129,650	359,474	1,390,654	1,621,090	48.77	3,371,218
Luna Pier	38,013,309	222,378	693,743	1,260,489	57.26	2,176,610
Mackinac Island	15,165,784	67,789	181,989	313,662	37.15	563,441
Madison Heights	333,524,400	1,732,059	5,106,234	14,279,216	63.32	21,118,509
Manistee	50,336,653	303,983	1,132,575	1,444,662	57.24	1,881,110
Manistique	20,769,654	115,685	434,626	721,745	61.25	1,272,056
Manton	6,847,204	50,373	89,014	195,329	48.88	334,715
Marine City	32,892,100	202,944	720,011	951,568	56.99	1,874,524
Marquette	254,312,924	1,591,261	2,486,674	7,711,429	46.36	11,789,365
Marshall	60,846,791	341,351	1,185,052	2,582,715	67.53	4,109,118

TABLE X-22. STATE EQUALIZED VALUATIONS AND PROPERTY TAX LEVIES IN MICHIGAN CITIES: 1980 (cont.)

City	State equalized valuation	County taxes	City taxes	School taxes	Total	
					Rate[a]	Taxes
Marysville	140,403,161	866,287	2,087,795	4,518,174	53.22	7,472,256
Mason	38,538,600	320,949	507,553	1,510,713	60.70	2,339,216
McBain	3,038,700	15,194	45,505	90,406	49.73	151,104
Melvindale	95,344,851	745,597	2,214,861	3,583,060	68.63	6,543,517
Memphis	6,434,673	33,932	123,777	217,292	58.28	375,002
Menominee	60,164,892	449,672	1,057,813	1,834,674	55.55	3,342,160
Midland	881,173,283	3,790,204	7,225,621	22,885,553	38.47	33,901,379
Milan	41,412,900	250,189	550,792	1,439,209	54.09	2,240,190
Monroe	441,830,488	2,584,708	5,609,738	14,561,028	51.50	22,755,474
Montague	14,700,311	89,801	249,907	509,881	57.79	849,590
Montrose	10,069,035	66,758	126,645	339,427	52.92	532,830
Morenci	13,920,400	79,210	179,100	452,676	51.08	710,986
Mount Clemens	149,728,597	725,525	3,184,727	6,790,465	71.47	10,700,717
Mount Morris	17,743,995	117,643	337,137	665,755	63.15	1,120,534
Mt. Pleasant	103,631,225	994,342	1,297,359	3,846,097	59.23	6,137,798
Munsing	20,724,932	148,183	481,854	695,375	63.95	1,325,412
Muskegon	260,296,081	1,590,097	4,435,497	10,675,944	64.16	16,701,538
Muskegon Heights	62,456,389	381,534	1,106,727	2,535,399	64.42	4,023,660
Negaunee	29,261,483	183,092	635,867	620,335	49.19	1,439,293
New Baltimore	42,687,981	206,849	936,826	1,579,156	63.78	2,722,832
New Buffalo	18,957,950	104,553	349,622	604,209	55.83	1,058,384
Newaygo	7,438,447	40,725	104,138	251,158	53.24	396,021
Niles	88,419,850	487,635	1,759,555	3,410,796	63.99	5,657,986
North Muskegon	41,627,351	254,293	385,053	1,600,091	53.80	2,239,437
Northville	69,923,475	466,608	1,078,122	3,025,041	65.33	4,567,771

TABLE X-22. STATE EQUALIZED VALUATIONS AND PROPERTY TAX LEVIES IN MICHIGAN CITIES: 1980 (cont.)

City	State equalized valuation	County taxes	City taxes	School taxes	Total	
					Rate[a]	Taxes
Norton Shores	175,068,205	1,069,457	1,437,853	6,597,869	52.01	9,105,178
Norway	18,011,000	141,503	270,173	516,658	51.54	928,334
Novi	345,223,050	1,792,812	3,538,053	13,379,369	54.20	18,710,235
Oak Park	233,298,950	1,211,568	6,157,716	10,733,178	77.59	18,102,462
Olivet	5,460,700	30,034	65,528	200,845	54.28	296,407
Omer	1,673,619	9,837	28,452	50,045	52.78	88,333
Onaway	5,200,641	29,856	104,027	126,185	50.01	260,068
Orchard Lake Village	44,349,300	230,315	510,017	1,663,165	54.19	2,403,496
Otsego	32,957,836	195,094	362,536	972,207	46.42	1,529,837
Owosso	91,851,930	625,052	1,495,231	2,808,924	53.66	4,939,207
Parchment	30,734,300	184,406	322,712	1,134,673	53.42	1,641,791
Perry	10,332,516	70,313	166,279	329,928	54.83	566,519
Petersburg	6,450,900	37,738	109,665	221,360	57.16	368,763
Petoskey	62,298,469	361,331	723,926	1,996,062	49.46	3,081,319
Pinconning	10,111,158	68,409	192,113	336,214	59.02	596,737
Plainwell	29,276,325	173,301	439,145	1,095,997	58.36	1,708,443
Pleasant Ridge	30,283,050	157,266	657,142	1,416,668	73.67	2,231,077
Plymouth	120,410,136	941,607	1,921,644	4,992,325	65.24	7,855,575
Pontiac	618,434,950	3,211,656	15,323,079	23,872,146	68.57	42,406,881
Port Huron	243,983,815	1,505,380	4,029,574	8,730,235	58.47	14,265,189
Portage	386,038,768	2,316,233	4,014,803	15,235,587	55.87	21,566,623
Portland	20,627,800	96,724	295,648	529,346	44.68	921,718
Potterville	7,125,350	39,189	106,567	287,556	60.81	433,312
Reading	5,301,335	25,181	67,223	149,447	45.62	241,852
Reed City	13,538,379	74,462	231,237	391,284	51.48	696,983

TABLE X-22. STATE EQUALIZED VALUATIONS AND PROPERTY TAX LEVIES IN MICHIGAN CITIES: 1980 (cont.)

City	State equalized valuation	County taxes	City taxes	School taxes	Total	
					Rate[a]	Taxes
Richmond	25,085,207	121,553	401,304	904,569	56.86	1,426,426
River Rouge	253,878,363	1,985,329	5,737,651	7,400,554	59.57	15,123,534
Riverview	141,014,620	1,102,734	2,749,786	4,812,829	61.45	8,665,349
Rochester	87,057,200	452,105	1,181,790	3,465,825	58.46	5,089,721
Rockford	24,957,600	119,796	349,406	802,923	50.97	1,272,126
Rockwood	27,308,195	213,550	532,513	1,183,537	70.66	1,929,600
Rogers City	31,343,967	179,914	564,191	879,512	51.80	1,623,618
Romulus	259,975,704	2,033,010	3,184,717	10,799,528	61.61	16,017,255
Roosevelt Park	41,905,013	255,989	419,051	1,575,523	53.71	2,250,563
Rose City	5,483,529	36,740	94,755	170,188	55.02	301,683
Roseville	384,911,665	1,865,128	6,335,646	16,240,088	63.50	24,440,862
Royal Oak	588,016,200	3,053,686	8,720,979	26,242,393	64.65	38,017,058
Saginaw	566,671,250	3,320,694	5,394,729	21,465,793	53.26	30,181,215
Saline	90,020,600	552,750	803,019	3,367,599	52.47	4,723,367
Sandusky	18,369,375	86,336	339,833	470,840	48.83	897,010
Sault Ste Marie	77,615,544	516,143	1,892,267	2,755,352	66.53	5,163,762
Scottville	8,171,279	42,491	149,534	291,388	59.16	483,413
South Haven	42,647,719	276,498	701,981	1,333,330	54.21	2,311,809
South Lyon	38,877,950	201,901	622,357	1,455,419	58.64	2,279,677
Southfield	1,151,339,250	5,979,135	20,778,219	44,509,863	61.90	71,267,217
Southgate	231,316,824	1,808,898	5,343,444	9,572,689	72.30	16,725,030
Springfield	51,249,572	287,510	866,630	2,056,906	62.66	3,211,046
St. Clair	47,958,594	295,905	922,249	1,387,442	54.33	2,605,596
St. Clair Shores	576,183,827	2,791,956	9,939,171	23,507,166	62.89	36,238,294
St. Ignace	18,790,780	82,993	336,355	543,993	51.32	964,341

TABLE X-22. STATE EQUALIZED VALUATIONS AND PROPERTY TAX LEVIES IN MICHIGAN CITIES: 1980 (cont.)

City	State equalized valuation	County taxes	City taxes	School taxes	Total	
					Rate[a]	Taxes
St. Johns	56,167,773	300,267	977,561	1,703,428	53.08	2,981,256
St. Joseph	109,024,663	601,271	1,975,681	4,490,893	64.83	7,067,845
St. Louis	19,012,897	107,706	284,703	749,361	60.05	1,141,770
Stambaugh	6,243,250	46,422	112,379	170,908	52.81	329,709
Standish	12,293,592	72,254	208,996	337,019	50.29	618,269
Stanton	5,877,200	28,684	70,406	174,983	46.71	274,075
Stephenson	5,820,838	43,505	14,873	148,101	35.47	206,478
Sterling Heights	1,213,542,765	5,880,343	15,135,669	51,301,272	59.59	72,317,284
Sturgis	80,102,906	381,290	897,153	2,740,961	50.18	4,019,404
Swartz Creek	60,635,914	402,017	557,857	2,350,856	54.60	3,310,730
Sylvan Lake	23,039,750	119,650	252,868	885,755	54.61	1,258,273
Tawas City	16,328,003	79,706	252,146	348,712	44.40	680,564
Taylor	521,586,988	4,078,812	13,069,778	21,099,393	73.33	38,247,981
Tecumseh	54,764,800	311,623	684,560	2,002,043	54.75	2,998,236
Three Rivers	51,170,300	243,570	756,348	1,743,270	53.61	2,743,189
Traverse City	180,774,983	1,139,316	2,419,167	5,830,445	51.94	9,388,928
Trenton	427,096,199	3,339,892	6,406,462	17,633,386	64.11	27,379,741
Troy	1,124,264,300	5,838,529	12,198,268	43,354,349	54.61	61,391,146
Utica	40,206,591	194,825	707,009	1,739,739	65.70	2,641,573
Vassar	19,869,000	106,240	445,055	542,050	55.03	1,093,355
Wakefield	8,670,012	68,580	174,037	293,653	61.85	536,270
Walker	154,800,050	743,040	744,000	5,296,000	44.01	6,813,041
Walled Lake	43,876,400	227,859	851,816	1,629,548	61.75	2,709,223
Warren	1,768,211,266	8,568,045	25,039,993	76,381,785	62.20	109,989,823
Watervliet	13,437,208	74,106	214,995	420,020	52.77	709,122

TABLE X-23. HISTORY OF OUTSTANDING DEBT OF LOCAL GOVERNMENTS IN MICHIGAN: 30 JUNE 1943 THROUGH 30 JUNE 1980

(In thousands of dollars)

June 30	Approved during year	Gross debt outstanding	Increase (+) or decrease (-) over preceding year
1943	--	524,938	-50,238
1944	10,120	487,721	-37,217
1945	11,160	458,492	-29,228
1946	16,151	436,144	-22,348
1947	67,979	440,662	+4,518
1948	36,722	441,897	+1,234
1949	84,573	467,039	+25,142
1950	126,226	542,510	+75,471
1951	125,461	581,894	+39,383
1952	202,511	646,012	+64,117
1953	214,838	702,292	+56,279
1954	184,185	820,966	+118,674
1955	179,566	908,472	+87,506
1956	290,451	1,052,676	+144,203
1957	293,913	1,196,846	+144,170
1958	255,835	1,317,220	+120,373
1959	410,698	1,520,304	+203,084
1960	421,284	1,662,906	+142,602
1961	398,507	1,787,002	+124,096
1962	521,376	1,993,658	+206,656
1963	291,348	2,099,554	+105,896
1964	379,377	2,311,606	+212,051
1965	391,750	2,502,027	+190,421
1966	526,918	2,783,167	+287,140
1967	635,432	3,168,082	+384,914
1968	680,783	3,671,601	+503,519
1969	748,673	3,986,009	+314,408
1970	844,074	4,494,679	+508,669
1971	1,268,020	5,104,755	+610,076
1972	1,207,075	5,541,270	+436,514
1973	993,239	5,842,602	+301,331
1974	1,129,697	6,376,186	+533,584
1975	1,368,630	6,844,035	+467,848
1976	1,679,225	7,467,859	+623,824
1977	1,006,121	7,841,682	+373,823
1978	1,749,929	8,506,599	+664,917
1979	2,249,641	9,776,082	+1,269,483
1980	2,446,044	10,461,678	+685,596

SOURCE: Michigan Department of Treasury, special release.

TABLE X-24. NUMBER OF FEDERAL CIVILIAN EMPLOYEES IN MICHIGAN, BY AGENCY, 31 DECEMBER: 1951-1978

Year	Army, Navy, Air Force, and other	U.S. Postal Service[a]	Veterans Administration	Other agencies[a]	All agencies[a]
1951	15,168	17,121	4,309	7,645	44,243
1952	17,687	18,016	4,141	7,476	47,320
1953	12,040	17,336	4,058	6,978	40,412
1954	9,877	17,298	4,410	6,668	38,253
1955	9,832	17,431	4,447	7,352	39,062
1956	9,665	17,323	4,577	7,651	39,216
1957	9,808	17,383	4,560	8,026	40,777
1958	9,605	18,426	4,504	8,453	40,988
1959	9,645	19,153	4,574	8,401	41,773
1960	9,638	19,438	4,598	8,541	42,215
1961	11,249	20,245	4,674	8,743	44,911
1962	10,880	21,047	4,795	8,621	45,343
1963	11,803	20,426	4,894	9,461	46,584
1964	11,689	19,603	4,927	8,386	44,605
1965	11,614	20,632	4,824	8,710	45,780
1966	12,713	24,189	4,931	9,035	50,868
1967[b]	13,946	25,770	4,962	11,060	55,738
1967	13,302	26,174	4,910	9,140	53,526
1968	13,067	26,646	4,818	9,131	53,662
1969	13,532	26,823	4,659	9,086	54,100
1970	12,015	26,982	4,636	9,803	53,436
1971	12,127	26,163	4,915	10,117[c]	53,322
1972	12,012	24,877	4,998	10,406[c]	52,293
1973	12,061	25,903	4,974	10,705	53,643
1974	12,512	24,889	5,222	11,390	54,013
1975	12,672	24,420	5,542	11,969	54,603
1976	12,857	23,522	5,694	11,804	53,877
1977	12,231	24,107	6,021	11,980	54,339
1978	12,114	23,226	5,938	12,072	53,350

SOURCE: U.S. Civil Service Commission, Annual Report, and special release.

a. Distribution by state is partially estimated.
b. Data for 1951-1967 refer to 30 June.
c. Excludes agencies with less than 2,500 employees.

TABLE X-25. DEPARTMENT OF DEFENSE MILITARY AND CIVILIAN PERSONNEL WORKING IN MICHIGAN, BY INSTALLATION: 30 SEPTEMBER 1979

Installation	Military personnel				Civilian personnel				
	Army	Navy	Air Force	Total	Army	Navy	Air Force	Other defense activities	Total
Battle Creek	10	15	--	25	14	--	576	1,137	1,727
Detroit	101	479	24	604	469	10	--	264	743
Grand Rapids	12	16	5	33	15	--	1	81	97
K.I. Sawyer AFB	--	--	3,724	3,724	4	--	413	6	423
Lansing	44	94	3	141	245	--	10	4	259
Sault Ste. Marie	2	--	74	76	255	--	14	--	269
Selfridge AFB	146	231	89	466	357	--	1,307	--	1,664
Sterling Heights	6	--	--	6	1,305	--	--	40	1,345
Warren (including Detroit Arsenal	300	--	2	302	3,861	--	--	11	3,872
Wurtsmith AFB	--	--	2,761	2,761	1	--	376	5	382
Other	276	68	361	705	689	68	74	184	1,015
TOTAL	897	903	7,043	8,843	7,215	78	2,771	1,732	11,796

SOURCE: U.S. Department of Defense, Distribution of Personnel by State-by Selected Location as of 30 September, 1979 (Washington, D.C.: 1980), p. 39.

TABLE X-26. FEDERAL CIVILIAN EMPLOYMENT IN MICHIGAN, BY COUNTY: 31 DECEMBER 1978 AND 1979

County	1978	1979
Alcona	50	56
Alger	63	62
Allegan	164	178
Alpena	141	109
Antrim	52	57
Arenac	51	48
Baraga	23	27
Barry	80	91
Bay	260	266
Benzie	72	51
Berrien	441	450
Branch	88	92
Calhoun	3,818	3,739
Cass	91	88
Charlevoix	51	58
Cheboygan	52	56
Chippewa	538	520
Clare	48	48
Clinton	905	167
Crawford	124	106
Delta	231	225
Dickinson	530	586
Eaton	202	211
Emmet	105	102
Genesee	1,363	1,345
Gladwin	34	33
Gogebic	163	163
Grand Traverse	268	269
Gratiot	116	113
Hillsdale	103	109
Houghton	185	154
Huron	134	132
Ingham	1,143	1,945
Ionia	121	112
Iosco	511	473
Iron	61	58
Isabella	130	131
Jackson	450	432
Kalamazoo	935	973
Kalkaska	17	16
Kent	1,940	2,024
Keeweenaw	68	54
Lake	37	42
Lapeer	108	115
Leelanau	63	91
Lenawee	202	213
Livingston	134	147
Luce	15	13
Mackinac	66	66
Macomb	8,130	8,957
Manistee	88	82
Marquette	810	735
Mason	88	94
Mecosta	85	92
Menominee	70	71
Midland	127	128
Missaukee	32	35
Monroe	202	186
Montclam	126	130
Montmorency	16	14
Muskegon	435	433
Newaygo	78	75
Oakland	2,926	2,524
Oceana	53	55
Ogemaw	40	40
Ontonagon	67	62
Osceola	51	54
Oscoda	35	34
Otsego	111	117
Ottawa	329	355
Presque Isle	42	43
Roscommon	32	34
Saginaw	1,224	1,256
St. Clair	101	99
St. Joseph	58	55
Sanilac	134	147
Schoolcraft	392	399
Shiawassee	112	113
Tuscola	132	132
Van Buren	123	125
Washtenaw	3,019	3,184
Wayne	17,389	17,418
Wexford	146	145
Michigan	53,350	54,039

SOURCE: U.S. Civil Service Commission, special release.

a. Includes 12 unspecified.

TABLE X-27. GOVERNMENT EMPLOYMENT AND PAYROLLS IN MICHIGAN, BY TYPE OF GOVERNMENT, FOR COUNTIES HAVING 100,000 POPULATION OR MORE AND FOR CITIES HAVING 50,000 POPULATION OR MORE: OCTOBER 1980

Type of government	Number of employees			October payroll ($000)	Average earnings[a]
	Full-time only	Full-time equivalent	Total		
Federal[b]	n.a.	n.a.	54,039	n.a.	n.a.
State	104,080	125,630	161,323	202,521	1,620
Local	288,962	309,424	396,723	492,498	1,600
Counties	43,271	45,846	50,461	60,864	1,334
Municipalities	65,137	67,597	83,354	107,733	1,597
Townships	5,974	7,897	22,128	11,017	1528
School dist	168,308	181,234	232,928	303,462	1,680
Special dist	6,272	6,850	7,852	9,422	1,382
TOTAL STATE AND LOCAL	393,042	435,054	558,046	695,019	1,605
Counties					
Bay	742	810	918	1,157	1,466
Berrien	1,046	1,129	1,268	1,189	1,065
Calhoun	707	712	726	942	1,325
Genesee	1,733	1,808	1,975	2,785	1,549
Ingham	2,185	2,375	2,621	2,885	1,216
Jackson	817	846	911	969	1,148
Kalamazoo	813	818	838	1,078	1,317
Kent	1,951	2,124	2,387	2,783	1,320
Livingston	269	290	320	282	985
Macomb	2,379	2,657	3,158	3,410	1,316
Monroe	801	839	905	1,074	1,286
Muskegon	1,113	1,207	1,468	1,405	1,179
Oakland	3,719	3,848	4,110	6,234	1,625
Ottawa	554	645	765	781	1,270
Saginaw	1,412	1,466	1,571	1,717	1,176
St. Clair	682	725	837	930	1,290
Washtenaw	1,230	1,290	1,510	1,759	1,365
Wayne	6,990	7,237	7,679	12,730	1,759
Cities					
Ann Arbor	898	927	1,045	1,652	1,791
Dearborn	1,303	1,389	1,694	1,868	1,361
Dearborn Heights	347	361	401	605	1,690
Detroit	20,657	21,483	22,474	39,638	1,852
Farmington Hills	238	240	286	390	1,624
Flint	3,675	3,820	4,260	5,390	1,421

TABLE X-27. GOVERNMENT EMPLOYMENT AND PAYROLLS IN MICHIGAN, BY TYPE OF GOVERNMENT, FOR COUNTIES HAVING 100,000 POPULATION OR MORE AND FOR CITIES HAVING 50,000 POPULATION OR MORE: OCTOBER 1980 (cont.)

Type of government	Number of employees			October payroll ($000)	Average earnings[a]
	Full-time only	Full-time equivalent	Total		
Cities (cont.)					
Grand Rapids	2,197	2,298	3,111	3,257	1,432
Kalamazoo	1,149	1,177	1,251	1,585	1,352
Lansing	2,625	2,683	2,862	4,118	1,547
Livonia	687	747	940	1,211	1,664
Pontiac	2,509	2,520	2,589	3,491	1,385
Roseville	299	303	325	550	1,823
Royal Oak	422	447	561	769	1,741
Saginaw	905	918	989	1,429	1,560
St. Clair Shores	439	453	505	749	1,668
Southfield	656	719	974	1,291	1,832
Sterling Heights	614	615	623	984	1,598
Taylor	392	398	429	578	1,453
Troy	394	421	528	747	1,788
Warren	1,004	1,017	1,089	1,775	1,748
Westland	376	388	449	701	1,813
Wyoming	406	422	571	611	1,448

SOURCE: Bureau of the Census, Public Employment in 1980, Series GE 78, no. 1 (Washington, D.C.: 1980), Tables 6 and 8; and Bureau of the Census, County Government Employment in 1980, Series GE 78, no. 4 (Washington, D.C.: 1980), Table 4; and Bureau of the Census, City Employment in 1980, Series GE 78, no. 2 (Washington, D.C.: 1980), Table 4.

NOTE: Figures include faculty and staff of state and local institutions of higher education. Average earnings by counties and cities are for employees other than teachers.

a. Full-time employees only.
b. Federal civilian employees as of December 1979.
n.a.: not available.

TABLE X-22. STATE EQUALIZED VALUATIONS AND PROPERTY TAX LEVIES IN MICHIGAN CITIES: 1980 (cont.)

City	State equalized valuation	County taxes	City taxes	School taxes	Total	
					Rate[a]	Taxes
Wayland	13,899,300	82,277	208,490	445,676	52.98	736,442
Wayne	206,324,088	1,613,454	3,830,615	10,087,130	75.28	15,531,199
West Branch	17,567,022	117,699	285,466	545,215	53.99	948,380
Westland	521,435,828	4,077,628	9,578,353	24,393,025	72.97	38,049,006
White cloud	6,661,870	36,474	103,259	218,275	53.74	358,008
Whitehall	29,239,210	178,616	380,110	1,168,941	59.09	1,727,667
Whittemore	2,788,800	14,502	22,310	75,996	40.45	112,807
Willaimston	16,953,700	141,190	329,749	712,093	69.83	1,183,843
Wixom	135,356,171	702,932	1,276,193	5,028,239	51.77	7,007,364
Woodhaven	166,554,983	1,302,460	2,388,398	7,061,575	64.56	10,752,433
Wyandotte	276,345,273	2,161,020	5,124,639	12,018,256	70.18	19,393,915
Wyoming	531,093,850	2,549,250	4,636,449	19,047,470	49.39	26,233,170
Yale	11,022,110	68,006	137,776	304,320	46.28	510,103
Ypsilanti	149,372,500	917,185	3,685,020	6,337,756	73.24	10,939,961
Zeeland	51,175,610	220,587	665,283	1,747,714	51.46	2,633,584
Zilwaukee	14,589,918	85,497	244,527	552,666	60.50	882,690
TOTAL	42,833,546,884	271,990,568	736,984,688	1,640,347,171	61.85	2,649,322,428

SOURCE: Michigan State Tax Commission, special release.

a. Taxes per $1,000 of state equalized valuation.

TABLE X-28. FULL-TIME EQUIVALENT EMPLOYMENT OF STATE AND LOCAL GOVERNMENTS PER 10,000 POPULATION IN MICHIGAN AND THE UNITED STATES, BY FUNCTION: OCTOBER 1968, 1976, AND 1980

	Michigan			United States		
	1968	1976	1980	1968	1976	1980
Local schools						
Instructional staff	115.5	127.1	122.2	111.7	126.9	125.7
Other	53.0	72.5	63.9	45.5	53.0	54.6
TOTAL	168.5	199.6	186.1	157.1	179.9	180.3
Higher education						
Instructional staff	15.3	19.8	19.6	14.0	19.0	19.1
Other	32.0	36.9	42.1	21.9	30.2	32.1
TOTAL	47.3	56.7	61.7	35.9	49.2	51.2
Other education	1.9	2.7	2.7	2.8	4.0	4.3
TOTAL EDUCATION	217.6	258.9	250.5	195.8	233.1	235.8
Welfare	6.6	16.4	20.1	11.1	15.9	16.4
Hospitals	42.4	40.6	41.5	39.3	44.7	46.9
Health	4.0	7.1	8.7	5.3	8.8	10.3
Highways	21.2	19.0	17.0	28.1	25.7	23.5
Police	18.5	23.3	24.6	20.5	25.4	26.1
Fire protection	8.5	8.3	8.0	9.0	10.0	10.0
Sewerage	2.2	3.1	4.3	2.8	3.8	4.2
Other sanitation	4.7	3.3	3.1	5.9	5.7	5.3
Parks and recreation	4.9	5.1	6.2	5.6	6.9	6.7
Natural resources	4.1	5.6	6.2	7.5	8.2	8.7
Correction	5.4	7.8	9.9	6.4	9.6	10.6
Local libraries	2.4	2.2	2.3	2.7	3.0	2.9
Social security administration	3.1	5.4	6.3	3.3	4.8	5.0
Financial administration	9.8	10.2	11.8	10.2	12.1	12.6
General control	9.7	17.0	19.4	11.5	15.9	18.0
Water supply	4.6	4.7	4.9	5.4	5.5	5.4
Other local utilities	5.0	5.2	6.1	7.6	8.8	3.3
State liquor stores	.7	.6	.7	.7	.7	.6
Other	11.4	17.5	18.6	17.1	26.8	35.3
TOTAL	386.9	461.4	469.9	395.9	475.5	487.7

SOURCE: Bureau of the Census, Public Employment in 1980 (Washington, D.C.: 1980), GE-78, no. 1, Table 11; and similar documents for 1976 (Table 11) and 1968 (Table 11).

TABLE X-29. PAY INCREASES IN STATE OF MICHIGAN CLASSIFIED CIVIL SERVICE, FISCAL YEARS: 1950-1982

Fiscal year ending	Average number employees	Classified payroll	Percentage of general pay increase
1950	22,560	$ 63,934,000	----
1951	21,485	66,285,000	12.2
1952	22,323	77,740,000	12.4
1953	22,635	85,393,000	---
1954	23,754	93,941,000	4.7
1955	24,839	105,142,000	6.3
1956	26,211	115,207,000	7.5
1957	28,614	134,092,000	---
1958	29,487	152,491,000	8.6
1959	29,948	156,082,000	---
1960	29,875	169,362,000	7.4
1961	31,239	177,578,000	---
1962	31,317	184,575,000	3.0
1963	31,557	187,155,000	---
1964	32,047	200,385,000	4.0
1965	33,274	214,415,000	3.3
1966	36,268	239,568,000	3.6
1967	39,932	285,152,000	6.0
1968	41,822	318,805,000	7.0
1969	43,874	361,939,000	6.3
1970	45,742	407,716,000	6.9
1971	47,227	451,827,000	6.4
1972	48,906	508,710,000	8.1
1973	52,673	530,000,000	5.0
1974	53,502	589,774,457	3.8
1975	55,996	651,432,334	2.1
12-19-74	---	---	5.0[a]
1976	57,856	738,527,879	3.0[b]
1977	60,395	841,403,192	8.3[c]
1978	65,190	957,971,306	6.0
1979	67,586	1,069,531,000	6.0[e]
1980	69,906	1,221,467,000	7.0
1981	68,000[d]	1,308,000,000[d]	8.4
1982	68,500[d]	1,443,000,000[d]	9.0

SOURCE: Michigan Civil Service Commission, 1979-1980 Annual Report (Lansing: 1981), p. 41.

a. Twenty-seven cents hourly.

b. Cost of living allowance, twenty cents per hour.

c. Includes cost of living allowance.

d. Estimated.

e. Plus seven cents per hour.

TABLE X-30. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS FEDERAL GOVERNMENT AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979

	Earnings of federal government employees[a]			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Keweenaw	40.85	2,129	41.57	2,269
Iosco	39.46	46,394	37.50	47,727
Marquette	21.54	90,293	14.58	67,029
Chippewa	11.41	11,412	10.99	11,701
Crawford	7.57	2,331	8.37	2,469
Calhoun	7.31	71,709	7.10	76,178
Leelanau	5.24	1,914	5.98	2,043
Lake	6.10	752	5.94	796
Dickinson	6.35	9,522	5.88	10,090
Alcona	6.43	1,078	5.74	1,140
Gogebic	5.04	2,938	4.76	3,011
Oscoda	4.42	614	4.30	651
Alger	4.35	1,302	4.18	1,379
Benzie	4.21	1,562	4.03	1,653
Macomb	3.64	164,568	3.60	174,203
Mackinac	3.65	1,411	3.51	1,495
Schoolcraft	3.59	1,168	3.41	2,237
Houghton	3.53	4,299	3.41	4,554
Otsego	3.10	2,347	2.82	2,483
Arenac	3.04	1,083	2.82	1,145
Iron	2.74	1,228	2.62	1,297
Missaukee	3.07	678	2.71	716
Delta	2.62	4,375	2.49	4,628
Presque Isle	3.70	1,839	2.42	1,958
Eaton	2.54	4,612	2.39	4,866
Ontonagon	2.48	1,269	2.33	1,330
Wexford	2.42	2,848	2.28	3,012
Washtenaw	2.39	58,998	2.26	62,325
Huron	2.36	3,782	2.18	4,013
Cheboygan	2.48	1,269	2.16	1,850
Alpena	2.23	3,654	2.14	3,876
Antrim	2.24	1,187	2.12	2,252
Emmet	2.24	2,484	2.11	2,633
Oceana	2.11	1,221	2.06	1,290
Charlevoix	2.19	1,907	2.06	1,028

TABLE X-30. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS FEDERAL GOVERNMENT AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979 (cont.)

	Earnings of federal government employees[a]			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Clinton	2.16	2,597	2.03	2,739
Clare	2.04	1,140	1.89	1,201
Gladwin	2.17	813	1.88	856
Montmorency	1.86	378	1.86	400
Manistee	1.93	1,904	1.85	2,013
Newaygo	1.84	1,742	1.83	1,836
Osceola	1.91	1,146	1.80	1,209
Ogemaw	2.06	888	1.76	935
Roscommon	1.85	733	1.72	771
Mecosta	1.81	1,886	1.72	1,989
Wayne	1.74	366,703	1.71	384,510
St. Clair	1.64	9,410	1.96	9,944
Grand Traverse	1.80	6,039	1.68	6,395
Mason	1.78	1,935	1.66	2,046
Garaga	1.63	524	1.57	552
Menominee	1.65	1,601	1.54	1,690
Montcalm	1.56	2,822	1.52	2,979
Sanilac	1.62	2,306	1.50	2,333
Ingham	1.53	39,940	1.48	43,834
Tuscola	1.58	3,012	1.44	3,187
Ionia	1.56	2,949	1.43	2,901
Barry	1.53	1,916	1.42	2,019
Allegan	1.48	3,777	1.41	3,981
Saginaw	1.46	25,321	1.41	26,790
Isabella	1.41	2,931	1.36	3,093
Van Buren	1.37	2,917	1.31	3,074
Hillsdale	1.38	2,352	1.30	2,482
Gratiot	1.31	2,621	1.29	2,768
Livingston	1.41	3,452	1.27	3,632
Cass	1.28	2,150	1.26	2,267
Kalamazoo	1.35	20,256	1.25	21,423
Shiwassee	1.35	3,118	1.25	3,359
Kent	1.34	42,257	1.23	44,982
Lapeer	1.25	2,734	1.22	2,880
Monroe	1.15	5,354	1.12	5,668

TABLE X-30. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS FEDERAL GOVERNMENT AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979 (cont.)

	Earnings of federal government employees[a]			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Jackson	1.13	10,214	1.09	10,788
Muskegon	1.12	10,048	1.07	10,611
Kalkaska	1.08	423	1.03	445
Bay	1.05	6,099	1.01	6,431
Berrien	1.00	10,076	1.00	10,639
Lenawee	1.05	4,612	.99	4,864
Luce	.97	356	.92	376
Ottawa	.98	7,837	.90	8,271
St. Joseph	.96	2,642	.88	2,784
Branch	.92	1,988	.87	2,097
Oakland	.87	67,435	.80	71,231
Genesee	.79	30,792	.78	32,440
Midland	.51	3,091	.49	3,257
Michigan	1.92	1,213,031	1.85	1,277,530
United States	5.52	72,940,000	5.20	77,340,000

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

NOTE: Counties are ranked according to this secotr's relative contribution to total labor and proprietors' earnings during 1978 (next-to-last column). These numbers pertain to earnings generated within the county, irrespective of the residence of the people who received them. For a complete tabulation of earnings at the state level, see Tables VI-3 and VI-4. The earnings residence adjustment for all industries is shown in Table VI-13.

a. Earnings of federal employees include earnings of military and civilian personnnel.

TABLE X-31. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS STATE OR LOCAL GOVERNMENT AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979

	Earnings of state and local government employees[a]			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Luce	70.12	25,825	69.64	28,465
Mecosta	42.24	44,052	42.51	49,147
Isabella	28.54	3,960	27.18	4,111
Lapeer	31.13	67,893	31.90	75,155
Roscommon	31.52	12,463	31.62	14,211
Houghton	30.00	36,519	30.65	41,032
Lake	28.16	3,468	29.00	3,887
Chippewa	26.05	26,053	28.47	30,304
Iron	28.17	12,581	28.24	13,966
Oscoda	28.54	3,960	27.18	4,111
Ingham	25.84	674,424	25.36	748,495
Gogebic	24.01	13,986	24.19	15,815
Baraga	24.10	7,727	24.17	8,511
Branch	23.91	51,407	23.94	57,863
Mackinac	23.89	9,229	23.76	10,128
Schoolcraft	23.43	7,605	23.67	8,595
Tuscola	23.58	44,819	22.53	49,661
Washtenaw	22.87	562,835	22.28	614,586
Oceana	19.33	11,162	21.61	13,574
Crawford	17.50	5,384	20.88	6,157
Clare	20.75	11,593	20.87	13,275
Ionia	18.62	35,201	19.63	35,695
Livingston	19.59	47,751	19.53	56,149
Alger	19.50	5,827	19.45	6,418
Keweenaw	18.49	964	18.76	1,024
Osecola	18.49	11,078	18.45	12,379
Newaygo	16.68	15,813	18.41	18,553
Alcona	20.41	3,411	18.34	3,643
Marquette	17.40	72,912	17.72	81,461
Eaton	17.40	31,526	17.40	35,452
Gladwin	18.91	7,059	17.12	7,789
Grand Traverse	16.81	56,375	17.03	64,687
Huron	16.98	27,164	16.45	30,282
Shiawassee	15.78	36,412	16.38	43,969
Alpena	16.28	26,571	16.36	29,616

TABLE X-31. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS STATE OR LOCAL GOVERNMENT AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979 (cont.)

	Earnings of state and local government employees[a]			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Ontonagon	15.49	7,930	15.79	9,037
Clinton	16.41	19,665	15.68	21,240
Van Buren	15.22	32,483	15.23	35,827
Otsego	15.58	11,816	15.09	13,281
Antrim	14.96	7,895	15.03	8,896
Arenac	15.57	5,556	14.96	6,079
Presque Isle	15.38	7,646	14.85	8,494
Montmorency	14.99	3,052	14.84	3,185
Menominee	14.43	13,981	14.72	16,151
Barry	14.39	17,977	14.23	20,235
Kalamazoo	14.62	219,428	14.18	241,827
Missaukee	14.65	3,226	14.13	3,726
Benzie	13.67	5,066	14.10	5,780
Wexford	13.79	16,206	13.98	18,453
Leelanau	11.92	14,252	13.91	4,728
Delta	13.76	22,973	13.82	25,698
St. Clair	12.87	71,606	13.76	81,058
Montcalm	12.55	22,758	13.26	26,024
Monroe	12.68	58,882	13.22	66,728
Ogemaw	13.98	6,017	13.19	6,976
Charlevoix	12.53	10,907	12.98	12,763
Manistee	12.19	12,040	12.90	13,984
Mason	12.73	13,848	12.82	15,826
Allegan	12.67	32,263	12.82	36,202
Jackson	12.10	108,792	12.13	120,601
Iosco	11.92	14,012	11.96	15,223
Lenawee	11.95	52,225	11.85	58,433
Kalkaska	11.86	4,632	11.78	5,156
Cheboygan	12.16	8,968	11.78	10,098
Hillsdale	11.20	19,217	11.70	22,287
Sanilac	11.85	16,827	11.65	18,895
Bay	11.33	65,735	11.62	73,382
Cass	11.16	18,700	11.19	20,134
Gratiot	10.42	20,846	11.10	23,785
Dickinson	11.05	16,552	11.05	18,956

TABLE X-31. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS STATE OR LOCAL GOVERNMENT AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979 (cont.)

	Earnings of state and local government employees[a]			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
St. Joseph	10.33	28,223	10.04	31,704
Muskegon	9.80	87,789	9.99	98,882
Wayne	9.27	1,955,673	9.76	2,200,208
Emmet	10.15	11,257	9.67	12,094
Berrien	8.72	87,394	9.27	98,619
Ottawa	8.96	71,471	8.90	81,659
Calhoun	8.14	79,821	8.31	89,215
Macomb	7.70	348,145	8.09	391,778
Genesee	7.31	284,495	7.77	323,227
Oakland	7.68	594,008	7.57	670,717
Saginaw	7.12	123,472	7.47	141,061
Kent	7.41	232,623	7.23	264,557
Midland	5.86	35247	5.79	39,025
Michigan	11.09	6,994,310	11.31	7,845,573
United States (millions)	11.08	146,342	10.76	159,849

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

NOTE: Counties are ranked according to this sector's relative contribution to total labor and proprietors' earnings during 1978 (next-to-last column). These numbers pertain to earnings generated within the county, irrespective of the residence of the people who receive them. For a complete tabulation of earngins at the state level, see Tables VI-3 and VI-4. The earnings residence adjustment for all industries is shown in Table VI-13.

a. Earnings of state and local employees include earnings of military (national guard) and civilian personnel. The latter include faculty and staff of state and local institutions of higher education, public schools, and those who staff police and fire departments (uniformed and otherwise) and other state and local units. Typically, in the records of state and local units themselves, higher education is considered a separate entity, although it receives annual appropriations for operating and capital needs.

XI. OUTDOOR ENVIRONMENT

Michigan's land area is 56,817 square miles, its water area 1,399 square miles. The state's highest elevation, Mount Curwood, in the Porcupine Mountains, is 1,980 feet above sea level. Michigan's lowest elevation of 572 feet is on Lake Erie.

The records of the General Services Administration indicate that the federal government owns or leases around 3,400,000 acres of land in the state. The Michigan Department of Natural Resources and the State Military Board own about 4,400,000 acres.

Land areas of Michigan counties are given in the U.S. Census of Population: 1970. Statistics on gross county areas are available from the Michigan Department of Natural Resources.

Data pertaining to climate at Michigan weather stations are available in Climate of Michigan, by Stations, a publication of the Michigan Weather Service. Separate reports, Local Climatological Data, are available for the stations at Alpena, Detroit, Escanaba, Flint, Grand Rapids, Lansing, Marquette, Muskegon, and Sault Ste. Marie. The Michigan Weather Service also publishes specific reports, such as those on temperature extremes and snowfall.

Air Quality Report is published annually by the Air Pollution Control Division of the Michigan Department of Natural Resources. Other DNR reports include statistics on usage of and facilities at state-owned forests and parks.

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TABLE XI-1. MICHIGAN CLIMATE, BY WEATHER STATIONS: 1980

	Temperature (°F)				Precipitation (inches)	
	January		July			
Station	Average	Departure from normal[a]	Average	Departure from normal[a]	Annual total	Departure from normal[a]
West Upper Division						
Alberta Ford Forestry Center	13.6		68.6M		--	
Baraga 5 WNW	15.7		66.2		E28.77	
Beechwood 7 WNW	12.0		67.1		32.82	
Bergland Dam	10.9		65.2		40.08	1.53
Big Bay 1 S	M		66.9M		E35.62	
Champion Van Riper Park	11.9		64.8		E31.94	-2.20
Copper Hrbr	20.3		63.2		38.08	
Crystal Falls 6 NE	11.2		65.2		29.93	-0.04
Herman	11.5		64.8		43.99	
Houghton FAA AP	15.7	1.2	66.9	2.8	35.34	
Iron Mountain Water Works	15.4	1.0	69.1	2.2	E26.34	-3.84
Ironwood	9.6	-3.0	64.6M	-2.9	E36.34	0.77
Ishpeming	14.3	-0.4	67.2	1.4	30.49	-0.49
Kenton U.S. Forest	13.1	0.2	62.9	-2.6	E31.88	1.02
Marquette WSO CI	13.1	0.4	65.7	1.5	33.92	-1.80
Marquette FAA AP	18.2	-0.2	66.3	0.0	31.25	0.41
Mott Island Isle Royal	--		61.6		--	
Ontonagon 6 SE	15.8		66.4		36.76	
Spalding	--		--		27.89	-2.06
Stambaugh 1 S	12.1	-1.3	66.5	0.9	30.81	0.15
Stephenson 6 W	16.5		69.0		32.75	0.66
Watersmeet	10.5	-1.7	63.0	-2.1	30.51	-3.59
Division	13.8	-0.6	65.8	0.5	33.33	1.23
East Upper Division						
Chatham Experimental Farm	17.3	0.5	66.9	1.8	28.64	-5.07
Cornell 4 WSW	16.6		67.5M		E27.18	
Detour Village 1N	20.5		67.0		22.22	-6.81
Dunbar Forest Experiment Station	17.3		64.3		26.33	
Escanaba	--		--		--	
Fayette 3 SW	19.9	1.1	66.7M	1.0	E25.13	-4.91
Grand Marais 1 SSE	18.7	0.5	61.7	-1.0	25.27	-6.14
Manistique	19.5	1.3	64.8	-0.3	E27.38	-2.86
Munising	19.2	1.0	65.2	0.3	E38.07	4.30
Newberry State Hosp.	16.8	0.5	64.6	-0.2	28.33	-3.21
Port Inland	--		--		28.51	
Rock	--		--		E29.42	-3.95
Rudyard 4N	15.8		65.1		E27.35	-4.44
St. Ignace-Mackinac BR	21.2		65.1		E19.69	

TABLE XI-1. MICHIGAN CLIMATE, BY WEATHER STATIONS: 1980 (cont.)

	Temperature (°F)				Precipitation (inches)	
	January		July			
Station	Average	Departure from normal[a]	Average	Departure from normal[a]	Annual Total	Departure from normal[a]
East Upper Division (cont.)						
Sault Ste. Marie WSO	15.0	0.8	63.1	-0.7	29.98	-1.72
Seney National WLR	17.4	0.7	67.5	1.5	E27.61	-4.72
Steuben	--		--		31.56	-.38
Tahquamenon Falls Park	16.5M		64.2		E27.85	
Trout Lake	15.0		M		E26.04	
Whitefish Point	19.5		60.8M		E31.50	
Division	17.9	1.0	65.0	0.3	27.42	-4.53
Northwest Lower Division						
Boyne Falls	20.9		67.8		24.51	
Cadillac	20.2	2.3	66.9	0.8	30.65	-1.74
Charlevoix	--		--		25.07	-5.72
Cross Village	21.1		66.1		23.62	
East Jordon	20.4	-0.5	--		24.32	-7.05
Fife Lake 4 S	--		--			
Fife Lake 4 SW	20.2		67.8		E34.68	
Frankfort 2NE	23.2		66.4M		E30.64	
Houghton Lake 6 WSW	19.3	0.0	67.0	-0.7	27.43	-1.19
Kalkaska	--		--		E27.59	-4.60
Lake City Experimental Farm	19.0	0.7	67.1	-0.1	29.33	0.46
Manistee	23.9M	0.5	69.3M	0.2	E32.91	1.99
Maple City	22.5		69.6		30.47	
Northport 2	--		--		--	
Old Mission 3 SSW	22.3M		67.7		23.54	
Pellston FAA AP	18.1	1.6	66.3	0.8	25.35	-5.86
Petoskey	23.4		66.6		21.88	
St. James Beaver Island	21.1		64.0		24.15	
Thompsonville	--		--		30.06	-2.51
Traverse City FAA AP	20.6	-0.2	68.9	0.2	26.07	-3.82
Wellston Tippy Dam	--		--		32.20	0.25
Division	21.1	0.9	67.3	0.0	27.30	-3.70
Northeast Lower Division						
Alpena WSO AP	19.8	2.0	67.6	2.1	24.12	-3.47
Alpena WW Trtmt Plant	21.6	1.1	67.9	0.9	23.66	-3.43
Atlanta 2 SW	20.5	1.9	67.1M	-0.1	24.53	-2.61
Cheboygan	20.1M	0.5	66.9	-1.1	20.87	-6.36
East Tawas	--		--		--	
Gaylord 2W	19.1		67.4		29.27	-3.42

TABLE XI-1. MICHIGAN CLIMATE, BY WEATHER STATIONS: 1980 (cont.)

	Temperature (°F)				Precipitation	
	January		July		(inches)	
Station	Average	Departure from normal[a]	Average	Departure from normal[a]	Annual total	Departure from normal[a]
Northeast Lower Division (cont.)						
Grayling	18.8	0.7	66.9	-0.5	30.79	-2.26
Hale Loud Dam	22.0	3.5	68.0	0.9	E25.57	-2.84
Harrisville 6 N	23.1		67.7		E24.73	
Higgins Lake	--		--		--	
Houghton Lake WSO AP	19.1	1.7	67.4	1.2	25.15	-3.24
Lupton 1S	19.2		66.9		E30.17	
Mio Hydro Plant	20.4	2.5	67.1	0.3	22.83	-3.54
Onaway State Park	19.5M	0.7	69.1	1.1	E22.86	-6.75
Rogers City 3S	27.7		66.8		E23.57	
Vanderbilt 11 ENE	17.9	0.6	65.3	-0.6	E27.66	-1.94
West Branch	20.7	2.3	68.2M	1.1	27.44	-1.53
Division	20.2	1.3	67.4	0.3	25.55	-3.65
West Central Lower Division						
Baldwin	20.1	-0.7	67.9M	-1.1	35.88	2.93
Hart	24.3	1.0	70.0	0.2	40.01	7.27
Hesperia 4 WNW	22.0		69.3M		40.29	8.35
Ludington 4SE	23.6M	0.3	68.4	-0.3	37.81	6.45
Montague 4 N	23.9		68.4		37.41	
Muskegon WSO AP	23.7	-0.3	70.9	0.9	35.37	3.84
Newago 2	--		--		37.63	
Scotville 1 NE	--		--		--	
Division	22.9	0.4	69.2	0.0	37.80	5.46
Central Lower Division						
Alma	21.8	-0.5	70.1	-1.5	30.92	1.71
Beaverton 1 ESE					E31.44	
Big Rapids Waterworks	21.7	0.8	70.5	1.4	30.43	-2.16
Evart	20.3		69.3M		31.34	
Gladwin	--		--		--	
Greenville 2 [illegible]E	21.5	-1.0	71.1	-0.2	35.43	3.71
Harrison 1 NNW	--		--		E29.91	-0.78
Midland	24.9M	1.8	71.8	0.2	29.44	-0.07
Mt. Pleasant Univ.	22.1	0.5	70.2	-0.7	31.04	1.20
Vestaburg					26.90	
Division	22.1	0.6	70.5	0.3	31.44	0.66
East Central Lower Division						
Bad Axe	22.8	1.3	69.0	-0.4	E30.76	1.94
Bay City	--		--		--	
Caro State Hospital	--		71.3	1.0	E31.05	2.85
Cass City 1 SSW					26.94	
Essexville	23.4	0.3	71.8	-0.2	32.74	5.56
Harbor Beach 3 NW	--		67.6	-0.8	E33.04	-0.31

TABLE XI-1. MICHIGAN CLIMATE, BY WEATHER STATIONS: 1980 (cont.)

	Temperature (°F)				Precipitation (inches)	
	January		July			
Station	Average	Departure from normal[a]	Average	Departure from normal[a]	Annual total	Departure from normal[a]
East Central Lower Division (cont.)						
Millington 3 SW	--		--		32.32	3.87
Saginaw Consumers Power Co.	24.3		73.2		35.50	
Saginaw 3					34.83	
Saginaw FAA AP	23.3	1.9	70.7	0.1	33.64	3.57
Saint Charles	23.8		73.3		32.94	4.04
Sandusky	M		67.8	-2.5	E27.90	-1.03
Sebewaing Michigan Sugar Co.	--		--		E27.34	0.45
Standish 1N	21.5	1.1	68.2	-0.9	27.76	-0.01
Standish 2 SSW	--		--		--	
Division	23.2	1.3	70.3	0.0	31.71	2.59
Southwest Lower Division						
Allegan	24.2	-0.6	71.0	-1.0	42.93	9.88
Benton Harbor AP	26.3M	0.4	72.5M	1.1	34.58	-1.46
Bloomingdale	23.9	-0.9	69.5	-2.3	44.84	8.10
Dowagiac 1 W	23.1M		72.5		E39.17	
Eau Claire 4 NE	24.9	0.2	73.2	0.2	34.56	-1.04
Grand Haven Fire Department	26.3	0.8	72.6	2.4	34.16	2.88
Grand Rapids WSO AP	25.1	1.9	72.7	1.2	36.90	4.51
Gull Lake Biological Station	24.7	1.2	73.4	1.4	37.19	3.54
Holland	26.1	0.7	71.8	0.4	35.58	0.57
Kalamazoo State Hospital	24.6	-0.2	73.5	0.6	38.86	4.87
Kent City 2 SW	--		--		35.39	3.37
Lowell	--		--		E36.28	3.64
Lowell 2 SE					34.09	
Niles	--		--		37.54	
South Haven	24.5	-1.9	70.0	-0.7	40.90	7.49
Division	24.9	0.0	72.1	0.3	38.14	3.60
South Central Lower Division						
Albion	--		--		--	
Battle Creek	24.3	1.0	72.6	0.8	38.50	4.36
Burlington 3E					40.01	
Charlotte	23.0	-0.1	69.9	-1.1	38.82	6.37
Coldwater State Sch	23.1	-0.8	72.1	1.0	42.57	8.78
Dimondale			--		33.99	
East Lansing 4 S	22.6		70.0		32.13	
Eaton Rapids	--		--		37.42	7.19
Grand Ledge 1 NW	--		--		34.24	3.83
Hastings	23.1	-0.5	70.9	-0.9	35.21	4.28
Hastings 3 SE					E33.17	
Hillsdale	23.9	0.3	71.2	0.4	39.04	2.31
Ionia	--		--		--	

TABLE XI-1. MICHIGAN CLIMATE, BY WEATHER STATIONS: 1980 (cont.)

Station	Temperature (°F)				Precipitation (inches)	
	January		July			
	Average	Departure from normal[a]	Average	Departure from normal[a]	Annual total	Departure from normal[a]
South Central Lower Division (cont.)						
Jackson FAA AP	23.3	0.3	73.3	2.1	29.84	-0.51
Lansing WSO AP	22.2	-0.4	72.5	1.6	28.60	-1.79
Munith 5 SW					34.24	
Nottawa 3 SE					E39.88	
Owosso Wastew. Plt	23.2M	0.2	72.5	1.8	E28.25	-1.32
St. Johns	24.3M	1.7	72.9	1.6	31.01	0.56
Three Rivers	24.5	0.0	74.2	2.2	36.70	2.55
White Pigeon 3 ENE					35.98	
Williamston					41.10	
Division	23.4	0.1	72.1	0.8	34.60	2.58
Southeast Lower Division						
Adrian 2 NNE	25.3M	1.0	M		37.95	5.05
Almont					29.58	
Ann Arbor, University of Michigan	24.3	-0.6	73.5	0.8	37.70	7.16
Chelsea 1 NE					35.18	
Dearborn	25.4		72.9		E36.18	
Detroit City AP	27.1	1.6	74.7	1.4	--	
Detroit Metro WSO AP	24.5	-0.1	72.7	0.4	37.24	5.55
Flint WSO AP	23.4	1.1	70.5	0.8	31.88	2.11
Flint 7 W					E29.33	
Grosse Pointe Farms	26.5		74.1M		E32.12	
Howell WW Plt	--		--		E30.50	0.52
Hudson					36.38	
Lapeer	22.9M	0.3	70.5	0.0	E38.82	10.28
Milford GM Proving Grounds	23.0	0.9	71.6	1.0	30.98	-2.17
Monroe	25.6M	-0.1	75.0	1.6	36.35	5.06
Morenci					41.55	
Mount Clemens AF Base	24.9	0.8	70.8	-1.1	37.89	10.20
Oxford					E33.86	
Pontiac State Hospital	23.5	0.0	73.7	1.8	E32.54	2.48
Port Huron	24.9	4.4	71.9M	0.1	26.66	-6.67
Washington 2 NNW	23.9		71.8		40.57	
Willis 5 SSW	23.7		72.2	1.3	34.86	2.73
Yale 1 NNE	--		--		30.34	0.90
Ypsilanti, Eastern Michigan Univ	25.2	0.5	74.6	1.8	35.66	4.98
Division	24.6	0.5	72.7	0.7	35.17	4.04

SOURCE: National Oceanic and Atmospheric Administration, Climatological Data - Michigan Annual Summary, 1980, vol. 95, no. 13 (Asheville, N.C.: 1980), Tables 1 and 2.

a. Normals for all stations are climatological normals based on the period 1941-1970.
M: One or more days record missing; if average value is entered, less than 10 days record is missing.
E: Amount is wholly or partially estimated.
AP: Airport
WSO: Weather station office.
Station names: Figures and letters following the station name, such as 12 SW, indicate distance in miles and direction from post office.

TABLE XI-2. STATE PARK USE AND TURNAWAY IN MICHIGAN: 1968-1980

Year	Number of day users[a]	Number of camper days[a]	Total attendance[a]	Number of camp permits	Camp turnaways	Day use turnaways[b]
1968	n.a.	n.a.	17,704	389,402	42,615	72,892
1969	n.a.	n.a.	18,956	409,140	75,527	57,289
1970	14,384	6,108	20,492	464,541	86,032	42,206
1971	15,419	6,495	21,914	491,807	84,258	52,465
1972	12,941	6,251	19,191	485,616	59,730	27,719
1973	13,606	6,248	19,849	496,812	57,445	25,378
1974	13,358	6,128	19,486	471,313	71,711	31,973
1975	14,768	5,598	20,366	462,123	70,962	46,708
1976	16,132	5,882	22,014	482,787	77,218	35,085
1977	n.a.	n.a.	22,344	480,133	79,107	40,154
1978	n.a.	n.a.	23,656	475,551	66,613	65,708
1979	n.a.	n.a.	21,426	422,371	51,128	38,227
1980	n.a.	n.a.	20,784	403,450	55,333	47,527

SOURCE: Michigan Department of Natural Resources, special release.

a. Figures in thousands.

b. Number of vehicles.

n.a.: not available.

TABLE XI-3. STATE FOREST CAMPGROUND USE: 1968-1980

Year	Number of camps	Number of campers	Camper days	Number of day users
1968	45,000	175,569	691,816	173,525
1969	56,746	220,117	835,341	220,535
1970	68,623	268,164	995,974	329,934
1971	73,714	284,779	1,083,684	352,796
1972	70,899	268,099	996,409	356,170
1973	79,114	292,746	1,040,361	391,782
1974	77,716	288,243	1,070,023	391,782
1975	82,359	283,232	1,059,659	396,741
1976	88,024	304,784	1,122,527	529,000
1977	90,227	311,539	1,147,905	n.a.
1978	85,806	299,197	1,067,043	529,246
1979	73,143	248,167	748,090	380,530
1980	71,168	242,025	615,126	282,289

SOURCE: Michigan Department of Natural Resources, special release.

n.a.: not available.

TABLE XI-4. LOCATION, ACREAGE, NUMBER OF CAMPSITES, AND USAGE OF MICHIGAN STATE PARKS: 1978-1980

Name	Post office location	Acreage	Number of campsites	Attendance		
				1978	1979	1980
		Upper Peninsula				
Baraga	Baraga US-41	56	137	55,535	42,492	33,009
Bewabic	Crystal Falls US-2	200	144	60,975	49,383	52,091
Brimley	Brimley M-221	151	270	172,051	148,627	152,553
Craig Lake[a]	n.a.	5,864	n.a.	n.a.	n.a.	n.a.
Detour[a]	St. Ignace M-34	403	22	n.a.	n.a.	n.a.
Fayette	Fayette US-2	365	80	134,664	101,167	102,731
Fort Wilkins	Copper Harbor US-41	199	165	293,327	211,895	182,186
Indian Lake	Manistique M-149	567	300	131,588	104,108	105,983
Lake Gogebic	Marenisco M-64	361	165	85,250	71,228	55,293
McLain	Hancock M-203	401	90	195,427	152,966	171,223
Muskallonge Lake	Newberry M-123	217	179	71,004	54,332	61,715
Palms Book[a]	Manistique M-149	308	(b)	69,831	56,386	63,803
Porcupine Mtns	Ontonagon M-107	58,332	95	365,698	305,083	328,727
Straits	St. Ignace I-75	181	318	357,435	285,582	216,613
Tahquamenon Falls	Paradise M-123	35,733	319	600,634	495,541	520,862
Twin Lakes	Winona M-26	175	62	34,700	26,542	27,328
Van Riper	Champion US-41	1,044	226	105,682	80,865	79,747
J.W. Wells	Cedar River M-35	974	155	104,871	83,881	85,101
		Northern Lower Peninsula				
Aloha	Cheboygan M-212	91	287	211,839	109,302	202,894
Bay City	Bay City M-247	196	255	224,214	206,168	268,836
Burt Lake	Indian River I-75	405	360	218,160	174,232	174,793
Cheboygan	Cheboygan US-23	932	78	48,555	49,763	47,352

TABLE XI-4. LOCATION, ACREAGE, NUMBER OF CAMPSITES, AND USAGE OF MICHIGAN STATE PARKS: 1978-1980 (cont.)

Name	Post office location	Acreage	Number of campsites	Attendance		
				1978	1979	1980
		Northern Lower Peninsula (cont.)				
Clear Lake	Atlanta M-33	290	200	91,907	74,061	65,487
Fisherman's Island	n.a.	2,608	41	40,601	35,288	36,064
Gladwin	Gladwin M-18	381	45	56,035	51,339	49,555
Harrisville	Harrisville US-23	94	229	120,229	109,658	112,782
Hartwick Pines	Grayling M-93	9,239	46	248,291	200,252	183,036
Hoeft	Rogers City US-23	301	144	61,605	49,840	50,578
Interlochen	Interlochen M-137	187	550	345,218	290,185	305,343
Leelanau[a]	Glen Arbor Co. Rd. 201	1,087	42	146,021	149,501	112,461
Ludington	Ludington M-116	4,514	398	810,252	761,972	769,017
Mears	Pentwater US-31	50	179	375,024	348,554	350,636
Mitchell	Cadillac M-115	32	270	205,262	185,379	194,401
Newaygo	Newaygo M-37	257	99	39,650	40,049	31,234
North Higgins Lake	Roscommon M-18, M-76	429	204	195,650	188,033	205,028
Onaway	Onaway M-211	158	101	91,253	72,300	69,069
Orchard Beach	Manistee M-110	201	175	103,566	91,281	85,080
Otsego Lake	Gaylord I-75	62	203	211,868	204,188	219,781
Petoskey	Petoskey US-31	305	90	261,159	252,914	235,457
Rifle River	Lupton M-33	4,329	159	110,542	106,968	107,444
Silver Lake	Mears US-31	1,379	249	764,870	713,003	693,955
South Higgins Lake	Roscommon US-27	305	504	395,792	299,050	293,630
Sturgeon Point[a]	n.a.	70	n.a.	n.a.	n.a.	n.a.
Tawas Point	E. Tawas US-23	175	202	262,029	256,293	246,394
Traverse City	Traverse City US-31	39	330	362,086	257,224	224,390
White Cloud	White Cloud M-20	89	89	72,574	55,122	32,825
Wilderness	Carp Lake US-31	7,514	210	159,057	154,644	150,241

TABLE XI-4. LOCATION, ACREAGE, NUMBER OF CAMPSITES, AND USAGE OF MICHIGAN STATE PARKS: 1978-1980 (cont.)

Name	Post office location	Acreage	Number of campsites	Attendance		
				1978	1979	1980
Northern Lower Peninsula (cont.)						
Wilson	Harrison I-75	36	160	137,261	102,852	103,973
Young	Boyne City M-75	563	293	157,170	151,849	147,625
Southern Lower Peninsula						
Algonac	Algonac M-29	1,024	281	268,839	271,151	263,874
Bald Mountain	Lake Orion M-24	3,118	25	489,959	515,310	537,264
Brighton	Howell I-96	4,889	222	277,103	261,388	235,466
Cambridge	Brooklyn US-12	183	(c)	n.a.	n.a.	n.a.
Dodge #4	Pontiac M-59	136	(b)	462,220	484,708	476,666
Duck Lake[a]	n.a.	610	n.a.	52,482	68,309	74,250
Fort Custer	Augusta I-94	2,962	(b)	66,146	106,195	103,620
Grand Haven	Grand Haven US-31	48	170	761,250	597,383	582,214
Grand Mere[a]	n.a.	393	n.a.	n.a.	n.a.	n.a.
W. J. Hayes	Onsted US-12	654	210	732,041	491,911	529,510
Highland	Milford M-59	5,504	25	336,888	335,521	327,357
Hoffmaster	Muskegon US-31	1,043	333	376,625	386,663	360,940
Holland	Holland US-31	143	342	1,695,926	1,346,517	1,414,760
Holly	Holly I-75	7,446	79	665,835	652,473	686,852
Ionia	Saranac M-66	3,998	25	52,092	70,188	60,587
Island Lake	Brighton I-96	3,466	25	315,901	426,606	340,280
Lake Hudson	n.a.	2,650	n.a.	n.a.	4,724	34,627
Lakeport	Port Huron US-23	566	256	317,349	244,771	275,811
Maybury	Northville	944	0	125,591	123,143	118,861
Metamora-Hadley	Metamora M-24	682	211	214,212	241,060	179,466
Muskegon	North Muskegon M-213	1,125	348	486,770	434,361	387,607
Ortonville	Ortonville M-75	4,205	70	227,721	164,400	132,944

TABLE XI-4. LOCATION, ACREAGE, NUMBER OF CAMPSITES, AND USAGE OF MICHIGAN STATE PARKS: 1978-1980 (cont.)

Name	Post office location	Acreage	Number of campsites	Attendance 1978	Attendance 1979	Attendance 1980
Southern Lower Peninsula (cont.)						
Pinckney	Pinckney M-36	9,930	270	478,146	423,852	380,752
Pontiac Lake	Pontiac M-59	3,664	25	382,342	405,175	273,776
Port Crescent	Port Austin M-25	655	181	139,008	126,593	117,899
Proud Lake	Milford I-96	3,525	150	424,782	355,279	269,062
Rochester-Utica	Utica M-59	1,242	(b)	500,146	484,397	409,833
Sanilac[a]	Port Austin US-25	112	19	16,158	12,965	12,122
Saugatuck	n.a.	509	n.a.	n.a.	11,714	24,365
Seven Lakes	Fenton US-23, I-75	1,379	(c)	159,172	172,929	104,442
Sleeper	Caseville M-25	1,003	270	185,891	193,758	222,974
Sleepy Hollow	Lansing US-27	2,678	(c)	204,828	185,076	166,407
Sterling	Monroe I-75	997	192	760,946	801,697	857,514
Van Buren	South Haven I-196	326	197	272,781	346,734	286,057
Warren Dunes	Sawyer I-94	1,502	249	1,322,651	1,258,758	1,244,851
Waterloo	Chelsea I-94	17,868	434	887,613	728,598	636,386
Yankee Springs	Middleville M-37	5,001	345	630,364	599,219	604,340

SOURCE: Michigan Department of Natural Resources, special release, and Michigan Tourist Council, special release.

a. Craig Lake administered by Van Piper; Detour by Straits; Palms Book by Indian Lake; Leelanau by Traverse City; Sturgeon Point by Harrisville; Duck Lake by Muskegon; Grand Mere by Warren Dunes; and Sanilac by Port Crescent.

b. No camping permitted.

c. Under development.

n.a.: not available.

TABLE XI-5. VISITOR DAYS OF USE OF NATIONAL FORESTS LOCATED IN MICHIGAN AND THE UNITED STATES: 1967-1980

(In millions of visitor days)

Year	Michigan				United States total
	Huron-Manistee	Hiawatha	Ottawa	Total	
1967	1,298.1	1,063.3	679.6	3,041.0	149,647.1
1968	1,538.8	1,352.9	777.6	3,669.3	156,655.3
1969	1,657.2	1,619.8	868.1	4,145.1	162,838.1
1970	1,664.0	1,587.6	991.2	4,242.8	172,554.5
1971	1,770.8	1,739.8	1,064.0	4,574.6	178,109.5
1972	1,901.3	1,704.1	1,117.0	4,722.4	183,958.3
1973	1,842.1	1,854.9	1,187.8	4,884.8	188,174.6
1974	1,955.6	1,821.9	1,240.5	5,018.0	192,915.8
1975	1,940.0	2,002.7	1,208.4	5,151.1	199,200.8
1976	2,154.8	2,030.3	1,289.6	5,474.7	199,928.1
1977	2,378.0	1,833.6	1,334.1	5,545.7	204,797.4
1978	2,390.2	1,749.2	1,363.4	5,502.8	218,496.3
1979	2,183.8	1,571.6	1,260.3	5,015.7	236,301.7
1980	2,652.7	1,683.3	1,150.8	5,486.8	233,549.3

SOURCE: U.S. Forest Service, special release.

TABLE XI-6. VISITORS TO ISLE ROYALE NATIONAL PARK AND TO PICTURED ROCKS AND SLEEPING BEAR DUNES NATIONAL LAKESHORES: 1967-1980

Year	Isle Royale	Pictured Rocks[a]	Sleeping Bear Dunes[b]
1967	9,529	--	--
1968	10,065	--	--
1969	10,403	--	--
1970	14,411	--	--
1971	15,868	--	--
1972	16,116	287,094[c]	--
1973	15,439	296,537	--
1974	13,934	298,856	--
1975	16,818	279,262	775,000
1976	16,000	317,000	800,000
1977	16,676	297,189	837,976
1978	16,415	239,902	759,000
1979	14,810	272,416	733,463
1980	14,996	313,040	689,274

SOURCE: Isle Royale National Park, Pictured Rocks National Lakeshore, and Sleeping Bear Dunes National Lakeshore, special releases.

a. Records not available prior to 1972.

b. Records not available prior to 1975.

c. Eleven-month total, beginning with February.

TABLE XI-7. NUMBER OF RESIDENT AND NONRESIDENT HUNTING LICENSES ISSUED IN MICHIGAN: 1964-1979

	Small game		Deer-firearm		Deer-bow	
Year	Resident[a]	Nonresident	Resident[a]	Nonresident	Resident[a]	Nonresident
1963	612,561	4,282	506,578	9,142	37,258	3,508
1964	630,692	4,258	552,008	11,591	41,759	3,735
1965	627,615	4,631	592,660	12,833	47,975	4,185
1966	637,927	4,735	561,401	12,911	47,992	4,200
1967	603,916	5,157	577,999	11,249	54,315	3,759
1968	575,013	5,047	609,120	14,360	59,039	4,061
1969	569,696	5,687	641,863	14,990	61,342	4,043
1970	581,855	6,202	616,173	12,729	58,234	3,584
1971	465,201	5,683	492,024	10,189	35,514	2,985
1972	445,589	6,396	455,304	9,108	30,400	2,576
1973	515,101	7,803	494,567	10,169	38,287	2,735
1974	564,476	8,609	551,923	11,820	46,269	2,851
1975	558,520	8,866	587,091	13,710	54,391	3,582
1976	503,165	7,601	535,550	13,781	57,184	4,287
1977	436,091	7,847	507,146	14,990	62,401	5,464
1978	366,040	7,059	549,057	16,388	--	6,793
1979	320,477	7,001	524,441	16,371	--	7,359

SOURCE: Michigan Department of Natural Resources, special release.
a. Includes senior resident.

TABLE XI-8. NUMBER OF RESIDENT AND NONRESIDENT FISHING LICENSES ISSUED IN MICHIGAN: 1964-1979

	Resident		Nonresident		Trout stamp		
Year	Senior	Annual[a]	7-day	Annual	One day[b]	Three day[b]	Total
1963	n.a.	711,331	81,201	105,216	n.a.	n.a.	180,160
1964	n.a.	705,209	73,924	108,023	n.a.	n.a.	188,381
1965	n.a.	723,189	73,188	111,876	n.a.	n.a.	197,733
1966	81,738	661,706	70,332	113,321	n.a.	n.a.	209,114
1967	72,679	708,457	72,624	119,677	n.a.	n.a.	230,546
1968	85,998	801,214	51,778	126,458	12,488	n.a.	294,000
1969	92,301	806,532	46,273	128,614	11,943	n.a.	292,523
1970	92,932	807,703	50,121	133,196	14,916	n.a.	303,774
1971	97,169	837,462	53,164	137,460	17,470	n.a.	312,432
1972	99,540	811,393	34,977	127,218	12,586	40,273	308,630
1973	103,805	832,539	35,175	131,671	14,963	56,144	311,565
1974	91,938	871,557	33,832	131,516	15,267	64,183	324,865
1975	95,206	916,571	36,907	137,919	17,851	71,421	352,207
1976	95,331	817,088	--	106,028	-- 188,381[c]	--	278,130
1977	94,659	770,299	--	99,971	-- 216,593	--	253,235
1978	95,469	738,324	--	94,089	-- 224,538	--	239,601
1979	94,594	722,448	--	92,197	-- 225,468	--	271,618

SOURCE: Michigan Department of Natural Resources, special release.
a. Includes 7-day licenses issued during 1968-1972.
b. Resident and nonresident.
c. Daily
n.a.: not applicable.

TABLE XI-9. NUMBER OF REPORTED FOREST FIRES IN MICHIGAN AND ACREAGE BURNED AS A RESULT: 1970-1980

Year	Lightning	Campfire	Tobacco smoking	Debris burning	Incendiary	Equipment use	All other	Total
				Number of fires				
1970	39	64	203	461	152	239	237	1,395
1971	25	79	212	347	91	293	163	1,210
1972	17	66	166	324	77	223	187	1,060
1973	7	47	142	295	83	139	119	832
1974	20	45	176	343	109	196	140	1,029
1975	40	77	204	225	79	42	186	853
1976	99	159	258	296	131	103	295	1,341
1977	72	122	223	329	169	155	363	1,433
1978	8	68	120	160	95	47	223	721
1979	7	44	67	113	73	52	116	472
1980	16	65	96	303	116	88	159	843
				Acres burned				
1970	56	255	741	2,844	581	947	1,069	6,492
1971	60	449	1,344	1,630	831	993	287	5,597
1972	24	630	1,151	1,628	553	804	864	5,654
1973	7	160	615	1,069	322	241	250	2,664
1974	80	195	1,566	2,176	999	608	464	6,087
1975	143	342	1,041	1,467	4,788	275	8,715	16,775
1976	19,264	645	1,626	1,122	923	505	1,385	25,470
1977	805	710	1,396	3,911	1,563	2,074	1,650	12,109
1978	17	207	513	420	420	159	795	2,639
1979	15	113	152	410	1,049	391	169	2,299
1980	68	353	1,211	1,733	1,410	1,347	3,157	9,279

SOURCE: Michigan Department of Natural Resources, special release.

Michigan Agricultural Statistics is an annual publication of the Michigan Department of Agriculture. Many of the data in this chapter are statistics that appeared in the 1981 edition.

The Agricultural Experiment Station and the Extension Service at Michigan State University also are sources of information. A list of the research reports issued by the Agricultural Experiment Station is available on request.

Income and employment statistics on agriculture in Michigan counties are prepared annually by the Bureau of Economic Analysis, U.S. Department of Commerce. These are the most comprehensive accounts of agricultural activity for individual counties. They form the basis for the evaluation of agriculture's importance in Table XII-23.

The U.S. Bureau of Commercial Fisheries issues *Current Fishery Statistics* as well as the annual *Fishery Statistics of the United States.*

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TABLE XII-1. NUMBER OF FARMS AND FARM ACREAGE IN MICHIGAN AND THE UNITED STATES, SELECTED YEARS: 1900-1981

	Old farm definition			New farm definition		
Year	Number of farms	Average size of farm (acres)	Total land in farms (000 acres)	Number of farms	Average size of farm (acres)	Total land in farms (000 acres)
			Michigan			
1900	203,261	86	17,562	n.a.	n.a.	n.a.
1910	206,960	92	18,941	n.a.	n.a.	n.a.
1920	196,447	97	19,033	n.a.	n.a.	n.a.
1930	179,000	101	18,000	n.a.	n.a.	n.a.
1940	190,000	97	18,400	n.a.	n.a.	n.a.
1950	161,000	111	17,900	n.a.	n.a.	n.a.
1960	118,000	131	15,400	n.a.	n.a.	n.a.
1970	84,000	151	12,700	n.a.	n.a.	n.a.
1975	76,000	155	11,800	70,000	164	11,500
1976	75,000	156	11,700	70,000	163	11,400
1977	74,000	157	11,600	68,000	168	11,400
1978	72,000	158	11,400	66,000	173	11,400
1979	n.a.	n.a.	n.a.	66,000	173	11,400
1980	n.a.	n.a.	n.a.	66,000	173	11,400
1981	n.a.	n.a.	n.a.	65,000	175	11,400
			United States (Farms in thousands)			
1900	5,737	147	838,592	n.a.	n.a.	n.a.
1910	6,361	138	878,798	n.a.	n.a.	n.a.
1920	6,448	149	955,884	n.a.	n.a.	n.a.
1930	6,295	157	990,112	n.a.	n.a.	n.a.
1940	6,102	175	1,065,114	n.a.	n.a.	n.a.
1950	5,388	216	1,161,420	n.a.	n.a.	n.a.
1960	3,963	297	1,175,646	n.a.	n.a.	n.a.
1970	2,949	374	1,102,371	n.a.	n.a.	n.a.
1975	2,767	391	1,081,448	2,521	420	1,059,420
1976	2,738	394	1,078,263	2,497	422	1,054,075
1977	2,706	397	1,075,003	2,456	427	1,047,785
1978	2,680	400	1,072,333	2,436	429	1,044,790
1979	n.a.	n.a.	n.a.	2,430	429	1,043,195
1980	n.a.	n.a.	n.a.	2,428	429	1,042,245
1981	n.a.	n.a.	n.a.	2,419	430	1,041,370

SOURCE: Michigan Agricultural Reporting Service, special release.

NOTE: The old farm definition included places of 10 or more acres that had annual sales of $50 or more, or that were smaller but had sales of $250 or more. The new farm definition includes places of any size that had annual sales of agricultural products of $1,000 or more.

n.a.: not available.

TABLE XII-2. GROSS FARM INCOME, PRODUCTION EXPENSES, AND REALIZED NET INCOME IN MICHIGAN AND U.S. AGRICULTURE: 1950-1979

	Total ($000,000)			Per farm ($)		
Year	Gross income	Production expenses	Net farm income	Gross income	Production expenses	Net farm income
			Michigan			
1950-1954[a]	833	508	325	5,507	3,342	2,165
1955-1959[a]	835	571	244	6,365	4,478	1,887
1960-1964[a]	919	663	256	8,386	6,053	2,333
1965-1969[a]	1,033	754	279	11,265	8,235	3,030
1970-1974[a]	1,411	1,028	383	17,396	12,661	4,735
1975	1,869	1,437	490	24,589	18,908	6,446
1976	1,950	1,593	321	25,994	21,241	4,284
1977[b]	2,211	1,741	405	32,512	25,609	5,958
1978	2,393	1,910	528	36,256	28,943	7,999
1979	2,830	2,328	576	42,871	35,266	8,722
			United States			
1950-1954[a]	34,996	21,574	13,422	6,739	4,159	2,683
1955-1959[a]	35,571	24,309	11,262	8,168	5,538	2,637
1960-1964[a]	41,258	29,931	11,327	11,193	8,126	3,126
1965-1969[a]	50,791	37,996	12,795	16,073	12,044	4,162
1970-1974[a]	76,949	56,376	20,574	26,971	19,768	7,506
1975	96,938	75,863	24,475	35,037	27,420	8,846
1976	104,177	83,131	18,682	38,051	30,364	6,823
1977[b]	107,440	90,293	17,829	43,749	36,767	7,523
1978	126,246	100,791	26,081	51,820	41,372	10,756
1979	145,518	118,618	30,959	59,885	48,815	12,535

SOURCE: K.T. Wright and Daniel A. Dueweke, The Changing Scene in Michigan Agriculture, Extension Bulletin E-1253 (East Lansing: Cooperative Extension Service, Michigan State University, 1978), Table 7; Farm Income Statistics (Washington, D.C.: Economics, Statistics, and Cooperatives Service, U.S. Department of Agriculture, 1978), Tables 1H and 3H; and Michigan Agricultural Reporting Service, special release.

a. Five-year average.

b. Beginning with 1977, based on the 1974 Census of Agriculture definition of a farm with sales of $1,000 or more.

TABLE XII-3. PRODUCTION EXPENSES OF FARMS IN MICHIGAN, BY CATEGORY: 1950-1979

	Current operating expenses												
Year	Feed	Live-stock	Fertilizer and lime	Seeds	Repairs & mainte-nance	Hired labor	Miscella-neous	Total	Deprecia-tion	Taxes	Inter-est	[illegible]	Total
1950-1954[a]	59.8	13.8	25.9	14.4	89.2	58.3	48.6	310.0	92.0	15.6	7.6	15.0	440.2
1955 1959[a]	67.3	19.0	38.1	16.0	110.6	49.8	63.2	364.0	132.6	24.4	10.7	8.4	540.1
1960 1964[a]	75.4	20.6	36.7	14.1	118.3	59.9	85.2	410.1	151.3	36.7	16.9	6.5	621.6
1965 1969[a]	80.9	16.2	43.2	17.9	111.1	53.5	96.4	419.2	159.4	48.1	28.8	9.0	664.5
1970	88.5	26.6	52.8	20.2	140.6	66.4	114.4	509.5	203.0	79.2	42.5	4.5	838.7
1971	94.2	22.9	77.6	28.7	116.6	98.2	157.7	595.9	214.3	88.5	45.4	.3	944.4
1972	93.9	24.0	71.9	31.2	114.1	105.0	167.0	607.1	211.3	69.4	47.4	9.1	944.3
1973	141.2	33.1	74.7	43.8	127.9	110.3	185.4	716.4	244.6	78.6	55.4	22.5	1117.5
1974	165.3	32.3	147.1	59.7	156.9	126.0	201.3	888.6	289.7	91.1	67.1	19.4	1355.9
1975	154.9	30.6	149.2	58.8	179.5	116.0	229.0	917.9	323.6	105.2	78.1	12.3	1437.0
1976	181.5	29.6	156.8	71.1	208.6	125.4	249.5	1022.5	357.1	121.3	86.9	5.3	1593.1
1977	177.9	28.6	171.8	74.2	253.6	135.6	281.3	1123.0	388.6	122.9	98.2	8.7	1741.4
1978	169.7	33.0	190.7	81.0	282.2	140.8	331.6	1229.0	419.2	137.7	115.2	9.2	1[illegible]0.3
1979	195.4	166.1	204.7	93.0	331.9	163.5	402.7	1557.3	462.4	157.0	144.8	6.1	2327.6

SOURCE: K.T. Wright and Daniel A. Dueweke, The Changing Scene in Michigan Agriculture, Extension Bulletin E-1253 (East Lansing: Cooperative Extension Service, Michigan State University, 1978), Table 4; and Michigan Agricultural Reporting Service, special release.

a. Five-year average.

TABLE XII-4. ACREAGE AND PRODUCTION OF MAJOR MICHIGAN CROPS: 1950-1980

Crop	1950-1954[a]	1955-1959[a]	1960-1964[a]	1965-1969[a]	1970-1974[a]	1977	1978	1979	1980
					Harvested acreage (Thousands of acres)				
All corn	1,729	1,913	1,895	1,734	2,063	2,935	2,820	2,870	2,925
Winter wheat	1,269	1,037	1,019	839	604	825	410	735	800
Oats	1,331	1,056	745	519	376	340	410	310	335
Tame hay	2,383	2,026	1,791	1,549	1,320	1,300	1,430	1,330	1,310
Soybeans	121	221	300	481	569	770	900	1,010	950
Dry beans	382	504	567	600	577	480	520	460	560
Sugar beets	62	68	74	80	85	86	92	88	97
Potatoes	67	50	45	44	42	40	42	41	40
Vegetables	138[b]	124	113	102	108	116	117	117	106
Fruit	167[b]	160	152	152	157	128	119	115	115
All crops	8,011	7,449	6,870	6,235	6,062	6,866	6,811	7,163	7,307
					Production (Thousands of units)				
All corn (bu)[c]	62,227	82,662	92,302	93,193	124,393	211,650	194,400	237,500	247,000
Winter wheat (bu)	34,142	33,000	36,365	30,849	23,084	33,000	16,400	31,605	35,200
Oats (bu)	48,049	50,820	37,215	27,392	19,988	18,700	23,370	18,910	20,100
Tame hay (tons)	3,631	3,329	3,356	3,330	3,065	2,855	3,857	3,833	3,844
Soybeans (bu)	2,334	4,990	6,783	10,904	13,397	23,870	21,600	30,300	30,400
Dry beans (cwt)	3,571	5,014	7,437	6,775	6,231	5,664	5,980	6,440	7,448
Sugar beets (tons)	699	980	1,153	1,355	1,571	1,796	1,770	1,550	1,892
Potatoes (bu)	12,468	11,734	13,708	14,678	16,089	17,072	16,588	15,913	15,037
Fruit (ooo lb)	n.a.	n.a.	n.a.	n.a.	n.a.	959	1,383	1,068	1,332

SOURCE: K.T. Wright and Daniel A. Dueweke, The Changing Scene in Michigan Agriculture, Extension Bulletin E-1253 (East Lansing: Cooperative Extension Service, Michigan State University, 1978), Tables 1 and 2; and Michigan Agricultural Reporting Service, special release.

a. Five-year average.

b. Estimate.

c. Grain only, excludes silage.

TABLE XII-5. MAJOR LIVESTOCK INVENTORY AND PRODUCTION OF MAJOR LIVESTOCK PRODUCTS IN MICHIGAN: 1950-1981

Livestock or product	1950–1954[a]	1955–1959[a]	1960–1964[a]	1965–1969[a]	1970–1974[a]	1977	1978	1979	1980	1981
					Inventory, 1 January (thousands)					
All cattle & calves										
Milk cows	930	831	698	568	435	405	404	402	400	390
Beef cows	63	97	119	141	192	239	196	138	140	155
Cattle on feed	100	104	148	185	226	215	200	180	165	160
Total	1,880	1,797	1,759	1,587	1,552	1,570	1,470	1,250	1,310	1,310
Hogs & pigs	812	739	809	652	756	720	640	925	1,040	830
Sheep & lambs	432	410	365	290	278	149	138	121	132	124
Chickens (all)	10,986	9,930	7,961	8,466	8,126	6,729	7,959	8,140	8,000	8,200
Turkeys (hens)	82	67	82	86	76	55	52	40	44	45
					Production (millions of pounds)					
Milk	5,409	5,272	5,485	4,897	4,670	4,761	4,793	4,830	4,970	n.a.
Cattle & calves	443	431	460	473	476	514	502	357	394	n.a.
Hogs	289	261	260	220	264	229	236	307	331	n.a.
Sheep & lambs	21	22	21	15	11	8	8	8	9	n.a.
Eggs (millions produced)	1,609	1,626	1,410	1,540	1,486	1,530	1,497	1,491	1,459	n.a.
Chickens (1,000 head produced)	14,493	8,782	4,584	4,413	4,883	4,560	4,950	4,400	4,630	n.a.
Turkeys (1,000 head raised)	1,049	1,162	1,241	1,158	1,040	1,210	1,210	1,200	1,450	n.a.
Commercial broilers 1,000 head raised)	3,485	4,350	2,732	1,200	697	910	1,190	2,570	1,552	n.a.

SOURCE: K.T. Wright and Daniel A. Dueweke, The Changing Scene in Michigan Agriculture, Extension Bulletin E-1253 (East Lansing: Cooperative Extension Service, Michigan State University, 1978), Tables 3 and 4; and Michigan Agricultural Reporting Service, special release.

a. Five-year average.

n.a.: not available.

TABLE XII-6. MICHIGAN CASH RECEIPTS FROM FARM MARKETINGS: 1972-1979

(In thousands of dollars)

Item	1972	1973	1974	1975	1976	1977	1978	1979
Livestock and products	581,403	709,317	687,857	732,935	812,249	835,808	994,583	1,147,363
Dairy	299,512	325,447	353,860	376,312	447,786	452,265	496,661	571,590
Cattle and calves	156,269	194,052	168,729	175,714	168,812	197,987	306,805	358,009
Hogs	69,476	97,474	86,762	101,511	102,205	95,545	97,554	120,011
Eggs	35,997	62,581	53,813	55,556	67,312	61,898	57,811	61,376
Sheep and lambs	3,297	4,613	4,819	3,376	2,874	3,890	5,320	4,114
All chickens	1,697	2,665	1,898	3,784	3,272	2,932	3,871	5,438
Wool	534	1,050	701	322	549	744	697	682
Other[a]	14,621	21,435	17,275	16,360	19,439	20,547	25,864	26,143
Crops	457,671	790,807	963,982	914,769	908,828	1,067,889	1,059,080	1,338,443
Field crops								
Corn	70,762	145,055	216,374	219,156	262,828	272,008	237,714	321,711
Dry edible beans	57,843	134,460	99,320	129,744	78,857	111,743	82,356	124,828
Soybeans	30,067	67,856	100,569	63,726	79,251	127,394	87,355	177,564
Sugarbeets	20,311	46,482	64,790	43,524	34,496	39,871	35,296	39,106
Wheat	31,659	71,093	95,236	113,701	81,360	82,272	54,379	111,918
Potatoes	25,240	41,498	48,274	34,142	36,975	40,961	67,092	67,729
Hay	10,961	15,059	18,629	30,154	24,849	26,160	31,435	30,983
Oats	6,083	8,949	15,411	16,644	18,800	16,247	14,033	18,320
Mint	725	911	1,111	1,281	1,186	1,304	1,352	1,475
Red clover seed	185	1,345	1,508	765	1,882	1,041	813	780
Rye	414	769	727	515	476	418	681	986
Barley	424	798	1,352	1,053	1,790	1,407	1,262	1,103
Vegetables	68,800	89,458	94,735	84,329	95,501	110,201	123,108	125,601
Other	7,200	8,503	8,389	8,641	12,146	17,794	10,790	12,984

TABLE XII-6. MICHIGAN CASH RECEIPTS FROM FARM MARKETINGS: 1972-1979 (cont.)

(In thousands of dollars)

Item	1972	1973	1974	1975	1976	1977	1978	1979
Fruit								
Apples	28,418	36,854	44,802	36,055	39,009	52,914	73,192	75,418
Blueberries[b]	n.a.	n.a.	n.a.	10,880	15,450	8,378	14,918	14,918
Cherries	22,354	27,041	46,875	25,455	27,831	28,478	72,918	58,205
Grapes	8,752	4,574	8,688	7,170	2,179	7,072	15,000	13,812
Peaches	1,059	5,692	8,108	7,290	5,584	8,502	9,504	6,905
Strawberries	5,218	4,723	5,503	5,297	5,798	4,152	5,621	6,536
Pears	1,922	1,408	1,616	2,023	1,512	2,661	2,621	2,610
Plums and prunes	1,924	2,189	2,076	2,353	2,105	1,953	3,279	2,874
Other	6,328	15,301	12,976	668	355	494	777	971
Other products								
Forest and maple	7,321	10,204	11,303	8,927	12,002	12,657	14,534	16,039
Greenhouse, nursery	43,701	50,585	55,610	61,276	66,606	91,807	99,250	105,067
All commodities	1,039,074	1,500,124	1,651,839	1,647,704	1,721,077	1,903,697	2,053,663	2,485,806
Government payments	61,203	38,888	10,438	13,276	7,300	21,195	45,510	15,593
TOTAL	1,100,277	1,539,012	1,662,277	1,660,980	1,728,377	1,924,892	2,099,173	2,501,399

SOURCE: Michigan Department of Agriculture, Michigan Agricultural Statistics, 1977 through 1980 (Lansing: annually), and special release (1979 selected updated data).

a. Turkey hatching eggs, other poultry, beeswax, honey, horses and mules, other livestock.

b. Prior to 1975, blueberries included in other.

TABLE XII-8. PRICES RECEIVED BY MICHIGAN FARMERS FOR CROPS, LIVESTOCK, POULTRY, AND PRODUCTS: 1971-1980

Item	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Hogs ($ per cwt)	17.90	25.50	39.50	35.80	48.00	44.70	40.50	47.60	42.90	38.80
Beef cattle ($ per cwt)	26.40	30.50	40.20	36.30	33.50	33.00	32.80	44.20	58.20	55.90
Veal calves ($ per cwt)	40.30	49.70	62.40	45.00	30.40	35.40	38.80	61.60	86.60	82.50
Sheep ($ per cwt)	8.20	9.70	13.60	11.40	11.20	13.70	13.80	20.30	28.00	27.90
Lambs ($ per cwt)	26.60	29.50	36.60	38.60	43.80	47.80	51.60	62.10	66.60	63.20
Milk ($ per cwt wholesale)	5.96	6.17	7.20	8.22	8.55	9.85	9.65	10.50	12.03	13.18
Chickens (¢ per lb)	8.00	8.50	11.80	8.30	14.50	12.00	10.00	11.00	12.00	9.00
Eggs (¢ per doz)	27.80	26.30	49.60	48.40	45.30	53.40	49.60	46.50	50.00	47.70
Wool ($ per lb)	.25	.29	.63	.47	.29	.51	.67	.67	.73	.70
Corn, grain ($ per bu)	1.03	1.49	2.52	2.85	2.35	2.04	1.92	2.22	2.46	2.66
Wheat ($ per bu)	1.34	1.67	4.30	3.80	3.22	2.53	2.02	3.30	3.82	3.77
Oats ($ per bu)	.71	.84	1.35	1.60	1.39	1.56	1.27	1.25	1.45	1.72
Soybeans ($ per bu)	3.05	4.60	5.73	6.40	4.78	7.22	5.54	6.81	6.13	6.63
Dry beans ($ per cwt)	11.50	9.70	27.30	16.00	25.90	16.10	18.30	14.80	18.50	21.07
All potatoes ($ per cwt)	2.47	3.66	6.13	4.15	5.56	4.17	4.14	4.57	4.44	6.42
All hay ($ per ton)	28.50	29.50	31.00	37.50	44.[illegible]0	43.00	58.50	45.50	36.00	36.08

SOURCE: Michigan Department of Agriculture, Michigan Agricultural Statistics, 1976 through 1980 (Lansing: annually), p. 15 (1980), and special release 1980.

NOTE: Marketing year, except 1980 which is calendar year.

TABLE XII-9. NUMBER OF WORKERS ON MICHIGAN FARMS: 1971-1980

(Annual averages in thousands of persons)

Workers	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Family	106	101	98	95	83	83	77	70	66	63
Hired	23	24	23	24	27	29	25	26	28	31
Total	129	125	121	119	110	112	102	96	94	94

SOURCE: Michigan Department of Agriculture, *Michigan Agricultural Statistics*, 1974 through 1979 (Lansing: annually), p. 16 (1979), and special release (1979 and 1980 data).

TABLE XII-10. FIRST FIVE RANKING COUNTIES IN MICHIGAN FOR SELECTED CROP PRODUCTION: 1980

Item	1	2	3	4	5
Corn, grain	Lenawee	Branch	Huron	Tuscola	Hillsdale
Winter wheat	Huron	Sanilac	Tuscola	Lenawee	Saginaw
Oats	Sanilac	Huron	Shiawassee	Tuscola	Wastenaw
Soybeans	Lenawee	Saginaw	Monroe	Shiawassee	Clinton
Dry beans	Huron	Tuscola	Gratiot	Sanilac	Bay
Sugar beets	Tuscola	Huron	Bay	Saginaw	Sanilac

SOURCE: Michigan Department of Agriculture, special release.

TABLE XII-11. MICHIGAN YIELDS PER ACRE, NINE LEADING CROPS: 1972-1980

Item	1972	1973	1974	1975	1976	1977	1978	1979	1980
Corn, grain (bu)	83.0	79.0	60.0	80.0	69.0	85.0	81.0	95.0	95.0
Winter wheat (bu)	40.0	35.0	40.0	38.0	38.0	40.0	40.0	43.0	44.0
Oats (bu)	55.0	50.0	55.0	56.0	51.0	55.0	57.0	61.0	60.0
Barley (bu)	51.0	39.0	49.0	47.0	46.0	52.0	47.0	47.0	53.0
Potatoes (cwt)	239	216	234	222	231	257	235	235	227
Soybeans (bu)	26.0	24.0	21.0	26.0	20.5	31.0	24.0	30.0	32.0
Dry beans (cwt)	12.2	9.8	12.5	9.1	10.0	11.8	11.5	14.0	13.3
Sugar beets (tons)	18.9	17.6	17.0	19.2	16.8	21.0	19.3	17.6	19.5
Hay, all (tons)	2.34	2.49	2.33	2.52	2.37	2.20	2.70	2.88	2.93

SOURCE: Michigan Department of Agriculture, *Michigan Agricultural Statistics*, 1975 through 1979 (Lansing: annually), pp. 20-26, and special release (1979 and 1980 data).

TABLE XII-12. QUANTITY AND VALUE OF LIVESTOCK AND POULTRY ON FARMS, MICHIGAN AND THE UNITED STATES: 1 JANUARY 1977-1981

	Michigan			United States		
Species and year	Number (1,000)	Value per head or bird	Total value (1,000)	Number (1,000)	Value per head or bird	Total value (1,000)
All cattle and calves						
1977	1,570	290.00	455,300	122,810	206.00	25,249,390
1978	1,470	325.00	477,750	116,375	232.00	27,030,385
1979	1,250	500.00	625,000	110,864	403.00	44,697,773
1980	1,310	640.00	838,400	111,192	502.00	55,831,294
1981	1,380	655.00	903,900	115,013	473.00	54,359,749
All hogs (including pigs)[a]						
1977	720	51.00	36,720	54,934	47.00	2,582,568
1978	640	66.00	42,240	56,539	63.20	3,575,279
1979	810	84.00	68,040	60,100	83.30	5,004,269
1980	1,040	59.00	61,360	67,353	56.10	3,774,920
1981	830	79.50	65,985	64,520	74.70	4,822,265
All sheep and lambs						
1977	149	36.50	5,439	12,776	42.40	541,458
1978	138	41.50	5,727	12,348	51.50	636,088
1979	121	55.00	6,655	12,220	71.70	875,927
1980	132	68.00	8,976	12,687	78.20	992,127
1981	124	75.00	9,300	12,942	19.90	904,488
All chickens[a]						
1977	7,912	1.65	13,055	378,361	1.70	643,720
1978	7,959	1.35	10,745	386,518	1.69	651,851
1979	8,140	1.55	12,617	396,933	1.75	696,019
1980	8,000	1.45	11,600	400,585	1.81	726,365
1981	8,200	1.35	11,070	392,200	1.88	738,542
Turkey - breeder hens[a]						
1977	55	9.00	495	3,069	11.12	34,119
1978	52	10.80	562	3,038	11.37	34,390
1979	40	16.00	640	3,370	12.53	42,222
1980	44	13.00	572	3,705	13.58	50,304
1981	45	18.00	810	3,920	14.33	56,188
Total value - all species						
1977	--	--	511,009	--	--	29,051,255
1978	--	--	537,024	--	--	31,927,993
1979	--	--	712,952	--	--	51,316,210
1980	--	--	920,908	--	--	61,375,010
1981	--	--	991,065	--	--	60,881,232

SOURCE: Michigan Department of Agriculture, Michigan Agricultural Statistics, 1980 (Lansing: 1980), p. 47, and special release (1981 data, and selected updated data for previous years).

a. 1 December of previous year.

TABLE XII-13. QUANTITY OF LIVESTOCK AND POULTRY ON MICHIGAN FARMS, BY CLASS: 1 JANUARY 1977-1981

(In 1,000 head)

Species and class	1977	1978	1979	1980	1981
Cattle and calves					
Classification by sex and weight					
Cows and heifers that have calved	644	600	540	540	545
Beef cows	239	196	138	140	155
Milk cows	405	404	402	400	390
Heifers, 500 pounds and over	267	269	223	257	268
For beef cow replacement	39	29	19	25	36
For milk cow replacement	157	184	149	193	182
Other heifers	71	56	55	39	50
Steers, 500 pounds plus	251	244	187	181	192
Bulls, 500 pounds plus	28	28	19	22	21
Calves, less than 500 pounds	380	329	281	310	354
All cattle and calves	1,570	1,470	1,250	1,310	1,380
Hogs[a]					
All hogs	720	640	810	1,040	830
Breeding hogs	101	101	134	161	120
Market hogs	619	539	676	879	710
Sheep and lambs					
Ewe lambs	17	13	14	16	15
Wether and ram lambs	3	3	3	3	3
Ewes, 1 year plus	91	88	75	82	80
Rams and wethers, 1 year plus	4	4	3	3	4
Total stock sheep	115	108	95	104	102
Sheep and lambs on feed	34	30	26	28	22
All sheep and lambs	149	138	121	132	124
Chickens[a]					
Pullets of laying age	3,380	3,333	3,500	3,850	3,860
Hens	3,060	2,967	2,850	2,400	2,540
Hens and pullets of laying age	6,440	6,300	6,350	6,250	6,400
Pullets, 3 months plus	641	915	840	825	950
Pullets, less than 3 months	799	703	900	885	800
Other chickens	32	41	50	40	50
All chickens	7,912	7,959	8,140	8,000	8,200
Turkeys					
Breeding hens	55	52	40	44	45

SOURCE: Michigan Department of Agriculture, Michigan Agricultural Statistics, 1980 (Lansing: 1980), pp. 48-54, and special release (1981 data).

a. 1 December inventory of previous year.

TABLE XII-14. ACREAGE, YIELD, PRODUCTION, AND VALUE OF MICHIGAN FIELD CROPS: 1976-1980

Crop	Year	Acreage Planted (000)	Acreage Harvested (000)	Production Per acre	Production Total (000)	Price received per unit[a] (dollars)	Value of production ($1,000)
Corn, all	1976	2,800	n.a.	n.a.	n.a.	n.a.	n.a.
	1977	3,000	n.a.	n.a.	n.a.	n.a.	n.a.
	1978	2,850	n.a.	n.a.	n.a.	n.a.	n.a.
	1979	2,900	n.a.	n.a.	n.a.	n.a.	n.a.
	1980	2,950	n.a.	n.a.	n.a.	n.a.	n.a.
Corn, grain (bu)	1976	n.a.	2,340	69.0	161,460	2.04	329,278
	1977	n.a.	2,490	85.0	211,650	1.92	406,368
	1978	n.a.	2,400	81.0	194,400	2.22	431,568
	1978	n.a.	2,500	95.0	237,500	2.46	584,250
	1980	n.a.	2,600	95.0	247,000	3.20	790,400
Corn, silage (ton)	1976	n.a.	430	11.5	4,945	16.00	79,120
	1977	n.a.	445	12.5	5,565	16.70	92,936
	1978	n.a.	420	12.5	5,250	16.30	85,575
	1979	n.a.	370	13.5	4,995	16.20	80,919
	1980	n.a.	325	13.5	4,388	19.20	84,250
Wheat, winter	1976	880	870	38.0	33,060	2.53	83,642
	1977	870	825	40.0	33,000	2.02	66,660
	1978	430	410	40.0	16,400	3.30	54,120
	1979	750	735	43.0	31,605	3.82	120,731
	1980	820	800	44.0	35,200	3.60	126,720
Oats (bu)	1976	420	385	51.0	19,635	1.56	30,631
	1977	400	340	55.0	18,700	1.27	23,749
	1978	440	410	57.0	23,370	1.25	29,213
	1979	330	310	61.0	18,910	1.45	27,420
	1980	355	335	60.0	20,100	1.90	38,190
Barley (bu)	1976	22	21	46.0	966	3.25	3,140
	1977	24	22	52.0	1,144	2.53	2,894
	1978	23	22	47.0	1,034	2.60	2,688
	1979	21	20	47.0	940	2.65	2,491
	1980	23	21	53.0	1,113	3.75	4,174
Rye, (bu)	1976	125	18	26.0	468	2.15	1,006
	1977	115	19	24.0	456	1.65	752
	1978	130	25	24.0	600	2.05	1,230
	1979	135	25	25.0	625	2.75	1,719
	1980	130	21	24.0	504	2.85	1,436
Soybeans (bu)	1976	570	565	20.5	11,583	7.22	83,629
	1977	780	770	31.0	23,870	5.54	132,240
	1978	910	900	24.0	21,600	6.81	147,096
	1979	1,020	1,010	30.0	30,300	6.13	185,739
	1980	960	950	32.0	30,400	7.35	223,440
Dry beans[b]	1976	560	545	10.0	5,450	16.10	87,745
	1977	550	480	11.8	5,664	18.30	103,651
	1978	530	520	11.5	5,980	14.80	88,504
	1979	470	460	14.0	6,440	18.50	119,140
	1980	580	560	13.3	7,448	24.50	182,476
Potatoes, all	1976	42.9	41.6	231	9,622	4.17	40,128
	1977	42.0	39.8	257	10,243	4.14	42,376
	1978	43.5	42.3	235	9,953	4.57	45,479
	1979	41.9	40.6	235	9,548	4.44	42,411
	1980	41.0	39.8	227	9,022	6.95	62,749

TABLE XII-14. ACREAGE, YIELD, PRODUCTION, AND VALUE OF MICHIGAN FIELD CROPS: 1976-1980 (cont.)

		Acreage		Production		Price received per unit[a] (dollars)	Value of production ($1,000)
Crop	Year	Planted (000)	Harvested (000)	Per acre	Total (000)		
Potatoes, summer (cwt)	1976	7.9	7.6	170	1,292	3.98	5,142
	1977	8.0	7.8	185	1,443	4.18	6,032
	1978	8.5	8.3	175	1,453	4.80	6,974
	1979	8.9	8.6	180	1,548	4.40	6,811
	1980	8.5	8.3	195	1,619	n.a.	n.a.
Potatoes fall (cwt)	1976	35.0	34.0	245	8,330	4.20	34,986
	1977	34.0	32.0	275	8,800	4.13	36,344
	1978	35.0	34.0	250	8,500	4.53	38,505
	1979	33.0	32.0	250	8,000	4.45	35,600
	1980	32.5	31.5	235	7,403	n.a.	n.a.
Hay, all (ton)	1976	n.a.	1,290	2.37	3,060	43.00	131,580
	1977	n.a.	1,300	2.20	2,855	58.50	167,018
	1978	n.a.	1,430	2.70	3,857	45.50	175,494
	1979	n.a.	1,330	2.88	3,833	36.00	137,988
	1980	n.a.	1,310	2.93	3,844	36.00	138,384
Hay, alfalfa (ton)	1976	n.a.	980	2.60	2,548	n.a.	n.a.
	1977	n.a.	1,000	2.45	2,450	n.a.	n.a.
	1978	n.a.	1,140	2.90	3,306	n.a.	n.a.
	1979	n.a.	1,040	3.10	3,224	n.a.	n.a.
	1980	n.a.	1,020	3.20	3,264	n.a.	n.a.
Red clover seed[c] (lb)	1976	n.a.	46	110	5,060	52.00	2,631
	1977	n.a.	25,000	85	2,125	57.00	1,211
	1978	n.a.	25,000	85	2,125	49.00	1,041
	1979	n.a.	26,000	95	2,470	49.00	1,210
	1980	n.a.	18,000	100	1,800	45.00	810
Popcorn[d] (lb)	1976	5.5	4.6	2,900	13,340	9.35	1,247
	1977	2.0	1.9	3,750	7,125	8.55	609
	1978	2.2	2.1	3,450	7,250	8.20	595
	1979	5.5	5.4	3,400	18,360	8.90	1,652
	1980	7.0	6.9	2,750	18,980	9.60	1,822
Maple Syrup (gal)	1976	n.a.	n.a.	n.a.	69	12.80	883
	1977	n.a.	n.a.	n.a.	90	13.40	1,206
	1978	n.a.	n.a.	n.a.	80	14.00	1,120
	1979	n.a.	n.a.	n.a.	85	16.00	1,360
	1980	n.a.	n.a.	n.a.	83	16.80	1,394
Spearmint, for oil (lb)	1976	n.a.	3.5	28	98	12.10	1,186
	1977	n.a.	3.3	24	79	16.50	1,304
	1978	n.a.	3.6	29	104	12.60	1,310
	1979	n.a.	3.8	31	118	13.00	1,534
	1980	n.a.	3.7	29	107	14.00	1,498
Sugarbeets (ton)	1976	93.6	91.4	16.8	1,540	22.40	34,496
	1977	92.3	85.5	21.0	1,796	20.10	36,100
	1978	93.0	91.5	19.3	1,770	23.50	41,595
	1979	93.0	88.0	17.6	1,550	38.90	60,295
	1980	99.0	97.0	19.5	1,892	n.a.	n.a.

SOURCES: Michigan Department of Agriculture, Michigan Agricultural Statistics, 1980 (Lansing: 1980), p. 23, and special release (1980 data, and selected updated data for previous years).

a. Marketing year

b. Production per acre in pounds.

c. Clean seed basis, and price per cwt..

d. Shelled corn basis, price per cwt.

n.a.: Not available.

TABLE XII-15. NUMBER OF TREES OF BEARING AGE, ACREAGE IN, AND PRODUCTION OF FRUIT CROPS IN MICHIGAN: 1975-1980

		Trees of bearing age		Production		Price received (dollars per cwt.)	Value of production ($1,000)
Fruit	Year	Number (1,000)	Acres (1,000)	Utilized (million lbs.)	Total (million lbs.)		
Apples	1975	3,100	51.7	680	700	5.10	34,680
	1976	3,000	48.9	480	480	8.80	42,240
	1977	2,900	46.1	570	570	7.90	45,030
	1978	2,800	43.3	920	890	7.60	67,640
	1980	2,750	41.0	900	900	6.10	54,900
Cherries, tart	1975	3,000	34.9	182	222	10.00	18,200
	1976	2,900	30.9	90	90	25.40	22,860
	1977	2,750	29.3	162	162	29.50	47,790
	1978	2,600	27.7	128	128	44.40	56,832
	1979	2,650	28.2	100	100	48.50	48,500
	1980	2,700	29.4	150	149	20.40	30,396
Cherries, sweet	1975	980	12.1	62	62	11.80	7,316
	1976	950	11.6	27	27	18.60	5,022
	1977	980	10.9	50	50	20.45	10,225
	1978	850	10.2	75	75	22.90	17,175
	1979	830	9.6	54	54	20.35	10,989
	1980	800	9.3	58	58	17.70	10,266
Blueberries[a]	1975	--	8.5	32	32	34.00	10,880
	1976	--	8.5	35.9	35.9	43.00	15,437
	1977	--	8.0	11.8	11.8	71.00	8,378
	1978	--	9.0	27.0	27.0	66.00	17,820
	1979	n.a.	9.5	36.0	36.0	44.90	16,164
	1980	--	9.4	41.0	41.0	34.40	14,104
Peaches	1975	1,260	12.5	55	65	13.40	7,370
	1976	1,200	11.9	40	40	14.10	5,640
	1977	1,000	9.9	55	55	15.60	8,580
	1978	700	6.9	60	60	16.00	9,600
	1979	600	5.8	35	35	19.40	6,790
	1980	500	5.0	40	40	19.20	7,680

TABLE XII-15. NUMBER OF TREES OF BEARING AGE, ACREAGE IN, AND PRODUCTION OF FRUIT CROPS IN MICHIGAN: 1975-1980 (cont.)

Fruit	Year	Trees of bearing age Number (1,000)	Trees of bearing age Acres (1,000)	Production Utilized Tons	Production Total Tons	Price received (dollars per Ton)	Value of production ($1,000)
Grapes[b]	1975	7,900	15.8	55,000	56,000	131	7,205
	1976	7,500	15.0	14,500	14,500	153	2,219
	1977	7,000	14.0	33,000	33,000	216	7,128
	1978	7,000	14.0	67,500	67,500	223	15,053
	1979	7,000	14.0	58,500	58,500	237	13,865
	1980	7,000	14.0	49,500	49,500	250	12,375
Pears	1975	750	7.9	15,000	15,000	140	2,100
	1976	600	6.4	6,000	6,000	220	1,320
	1977	450	4.8	8,000	8,000	221	1,768
	1978	290	3.0	10,000	10,000	201	2,010
	1979	270	2.8	9,000	9,000	198	1,782
	1980	270	2.8	10,000	10,000	223	2,230
Prunes & Plums	1975	700	7.4	20,000	21,000	119	2,380
	1976	600	6.4	16,000	16,000	133	2,128
	1977	500	5.4	14,000	14,000	141	1,974
	1978	450	4.8	24,000	24,000	138	3,312
	1979	410	4.4	14,000	14,000	207	2,898
	1980	410	4.4	12,500	12,500	208	2,600

SOURCE: Michigan Department of Agriculture, Michigan Agricultural Statistics, 1980 (Lansing: 1980), p. 35, and special release (1980 data, and selected updated data for previous years).

a. Bushes of bearing age.

b. Number of vines of bearing age.

n.a.: not available.

TABLE XII-7. MICHIGAN INDEXES OF PRICES RECEIVED BY FARMERS, U.S. PRICES PAID BY FARMERS, AND RATIO: 1970-1980

Item	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Livestock											
All livestock	116	114	125	160	163	170	184	179	207	238	245
Dairy products	110	113	117	136	156	162	187	183	199	229	249
Meat products	124	118	148	200	176	189	182	178	234	278	261
Poultry and eggs	118	103	93	161	159	151	173	161	162	171	164
Crops											
All crops	98	107	112	174	233	190	189	192	204	217	241
Cash field	104	126	128	231	331	230	231	204	219	233	268
Fruits	80	86	92	124	153	133	143	181	213	226	242
Vegetables	106	98	117	139	135	161	152	189	172	174	196
Feed crops	105	109	104	157	237	223	208	187	191	206	228
All products	108	111	119	166	195	179	187	186	206	229	244

SOURCE: Michigan Department of Agriculture, Michigan Agricultural Statistics, 1980 (Lansing: 1980), p. 15-16, and special release (U.S. data and 1980 Michigan data).

NOTE: Indexes are calculated using 1969 as the base year.

a. Ratio of Michigan index of prices received for all farm products to U.S. index of prices paid for commodities, services, interest, taxes, and wage rates.

n.a.: not available.

TABLE XII-16. ACREAGE, PRODUCTION, AND VALUE OF MICHIGAN VEGETABLES FOR FRESH MARKET: 1976-1980

Crop and season	Year	Acres		Production		Price received (per cwt)	Value of production[a] ($1,000)
		Planted	Harvested	Per acre (cwt)	Total (1,000 cwt)		
Asparagus	1976	18,700[c]	18,000	10	180	33.00	5,934
	1977	19,500[c]	19,000	11	209	44.60	9,314
	1978	20,000[c]	19,500	13	254	56.70	14,400
	1979	20,000[c]	19,500	13	254	61.20	15,538
	1980	20,000[c]	19,500	12	234	51.30	12,014
Carrots	1976	6,000	6,000	274	1,641	7.70	12,640
	1977	6,300	5,600	232	1,301	9.83	12,793
	1978	6,500	6,100	265	1,614	9.69	15,632
	1979	6,700	6,600	260	1,713	7.88	13,403
	1980	6,800	5,600	239	1,340	11.70	15,704
Califlower	1976	800	700	55	39	22.00	859
	1977	1,100	1,000	50	50	16.60	831
	1978	1,200	1,100	50	55	28.50	1,567
	1979	1,200	1,100	70	77	27.70	2,132
	1980	1,200	1,000	50	50	36.50	1,824
Celery	1976	2,500	2,300	442	1,016	8.52	8,665
	1977	2,500	2,400	448	1,074	8.24	8,854
	1978	2,600	2,300	407	936	14.10	13,197
	1979	2,700	2,600	443	1,153	9.52	10,982
	1980	3,200	3,100	447	1,387	9.29	12,890
Peppers	1976	1,800	1,700	70	119	15.40	1,832
	1977	1,900	1,800	75	135	16.00	2,163
	1978	2,000	1,900	78	148	18.60	2,759
	1979	2,000	1,900	77	146	24.20	3,536
	1980	1,800	1,700	74	126	25.50	3,207
Strawberries	1976	3,000	3,900	80	232	34.00	7,886
	1977	2,900	2,800	70	196	32.00	6,280
	1978	2,900	2,800	75	210	38.00	7,973
	1979	2,900	2,800	70	196	51.20	10,041
	1980	2,800	2,700	65	176	47.50	8,358

TABLE XII-16. ACREAGE, PRODUCTION, AND VALUE OF MICHIGAN VEGETABLES FOR FRESH MARKET: 1976-1980 (cont.)

Crop and season	Year	Acres		Production		Price received (per cwt)	Value of production[a] ($1,000)
		Planted	Harvested	Per acre (cwt)	Total (1,000 cwt)		
Beans, snap	1976	2,900	2,800	33	92	20.00	1,840
	1977	3,000	2,700	34	92	20.20	1,858
	1978	3,000	2,600	30	78	23.10	1,802
	1979	3,100	2,900	28	81	25.60	2,074
	1980	3,100	2,900	32	93	26.20	2,437
Cabbage	1976	3,950	3,550	158	561	5.22	2,927
	1977	3,600	3,200	164	526	6.28	3,302
	1978	3,200	3,000	177	532	8.95	4,763
	1979	3,300	3,000	163	489	6.56	3,207
	1980	3,600	3,000	153	460	9.35	4,300
Cantaloupe	1976	2,100	1,900	95	181	13.70	2,480
	1977	1,900	1,700	105	179	11.10	1,987
	1978	1,700	1,600	110	176	12.20	2,147
	1979	1,700	1,600	115	184	16.20	2,981
	1980	1,700	1,500	120	180	19.50	3,510
Corn, sweet	1976	12,500	12,300	57	701	7.33	5,138
	1977	12,500	12,300	63	775	7.07	5,479
	1978	12,000	11,700	60	702	9.28	6,515
	1979	11,700	11,500	58	667	8.28	5,523
	1980	11,700	11,500	67	771	8.92	6,877
Cucumbers	1976	2,000	2,000	90	180	11.00	1,980
	1977	2,200	2,100	120	252	9.28	2,339
	1978	2,200	2,100	104	221	12.10	2,674
	1979	2,000	1,900	115	219	14.80	3,241
	1980	2,000	1,900	110	209	11.30	2,362
Lettuce	1976	1,600	1,400	170	238	13.90	3,308
	1977	1,500	1,300	200	260	9.60	2,496
	1978	1,500	1,300	220	286	13.70	3,918
	1979	1,500	1,400	200	280	22.00	6,160
	1980	1,600	1,200	210	252	19.30	4,864

TABLE XII-16. ACREAGE, PRODUCTION, AND VALUE OF MICHIGAN VEGETABLES FOR FRESH MARKET: 1976-1980 (cont.)

		Acres		Production		Price	Value of
Crop and season	Year	Planted	Harvested	Per acre (cwt)	Total (1,000 cwt)	received (per cwt)	production[a] ($1,000)
Onion[a]	1976	7,600	7,400	305	2,257	9.40	19,270
	1977	8,100	7,700	295	2,272	6.30	11,466
	1978	8,200	7,900	340	2,686	5.77	12,983
	1979	8,000	7,900	340	2,686	4.69	10,506
	1980	7,500	7,200	250	1,800	13.20	18,480
Tomatoes	1976	4,400	4,300	95	409	15.50	6,340
	1977	4,100	3,900	100	390	22.90	8,931
	1978	3,900	3,600	105	378	18.70	7,069
	1979	3,600	3,400	120	408	25.10	10,241
	1980	3,700	3,400	110	374	24.50	9,163

SOURCE: Michigan Department of Agriculture, Michigan Agricultural Statistics, 1980 (Lansing: 1980), pp. 37-39, and special release (1980 data, and selected updated data for previous years).

NOTE: Includes historic revisions for 1975-1978.

a. For Onions-- value of sales.

b. Includes processing.

c. Bearing acres only.

TABLE XII-17. MICHIGAN STRAWBERRIES FOR FRESH MARKET AND PROCESSING, PRODUCTION, PRICE, AND VALUE: 1976-1980

Year	Fresh market			Processing		
	Production (1,000 cwt)	Price received per cwt	Value of production ($1,000)	Production (1,000 cwt)	Price received per cwt	Value of production ($1,000)
1976	158	$ 36.00	5,688	3,700	$594.00	2,198
1977	140	33.00	4,620	2,800	593.00	1,660
1978	140	42.00	5,880	3,500	548.00	2,093
1979	143	56.10	8,022	2,650	762.00	2,019
1980	137	51.10	7,001	1,950	696.00	1,357

SOURCE: Michigan Department of Agriculture, Michigan Agricultural Statistics, 1980 (Lansing: 1980), p. 37, and special release (1980 data).

TABLE XII-18. MICHIGAN VEGETABLES FOR FRESH MARKET AND PROCESSING, PRODUCTION, PRICE, AND VALUE: 1976-1980

Crop	Year	Fresh market			Processing		
		Production (1,000 cwt)	Price received per cwt	Value of production ($1,000)	Production (tons)	Price received per ton	Value of production ($1,000)
Asparagus	1976	20	38.70	774	8,000	645.00	5,160
	1977	32	51.00	1,632	8,850	868.00	7,682
	1978	44	60.00	2,640	10,500	1,120.00	11,760
	1979	52	78.40	4,077	10,080	1,137.00	11,461
	1980	70	65.00	4,550	8,220	908.00	7,464
Carrots	1976	1,195	9.81	11,721	22,300	41.20	919
	1977	1,041	11.60	12,126	13,000	51.30	667
	1978	1,088	13.20	14,341	26,300	49.10	1,291
	1979	1,129	10.70	12,104	29,200	44.50	1,299
	1980	880	16.30	14,371	22,980	58.00	1,333

SOURCE: Michigan Department of Agriculture, Michigan Agricultural Statistics, 1980 (Lansing: 1980), p. 39, and special release (1980 data and selected updated data for previous years).

NOTE: Disposition data not publishedable for Cauliflower, Celery and Peppers. Includes historic revisions for 1975-1978.

n.a.: not available.

TABLE XII-19. MICHIGAN VEGETABLES FOR PROCESSING, ACREAGE, YIELD, PRODUCTION, AND VALUE: 1976-1980

Crop and season	Year	Acres planted	Acres harvested	Production Per acre tons	 Total tons	Price received per ton	Value of production ($1,000)
Snap beans							
	1976	14,200	14,000	2.17	30,400	122.00	3,709
	1977	17,500	16,800	2.46	41,300	125.00	5,163
	1978	18,000	16,400	2.10	34,450	148.00	5,099
	1979	17,600	17,300	2.08	35,980	162.00	5,829
	1980	14,600	13,700	2.80	38,360	156.00	5,984
Cucumbers for pickles	1976	27,000	25,500	4.05	103,300	112.00	11,570
	1977	25,200	24,500	4.65	114,000	109.00	12,426
	1978	27,500	26,500	4.75	126,000	120.00	15,120
	1979	26,500	25,500	4.62	117,810	132.00	15,551
	1980	19,000	18,900	5.56	105,080	125.00	13,135
Tomatoes							
	1976	4,100	4,000	18.63	74,500	65.20	4,857
	1977	4,200	4,100	15.49	63,500	65.80	4,178
	1978	4,600	4,500	18.04	81,200	67.30	5,465
	1979	5,700	5,600	18.11	101,420	68.30	6,927
	1980	6,100	6,000	12.28	73,680	72.90	5,371

SOURCE: Michigan Department of Agriculture, Michigan Agricultural Statistics, 1980 (Lansing: 1980), p. 37, and special release (1980 data).

NOTE: Processing vegetables estimated but not published to avoid disclosure of individual operations include: Beets, Cabbage for Kraut, Sweet Corn and Green Pears.
Includes historic revisions for 1976-1978.

TABLE XII-20. ONION PRODUCTION AND UTILIZATION IN MICHIGAN: 1974-1980

(1,000 cwt)

Year	Sales Before Jan. 1	 After Jan. 1	 Total	Shrinkage Before Jan. 1	 After Jan. 1	Total production	Total stocks Jan. 1[a]	Stocks as percentage of total production
1974	1,190	727	1,917	149	73	2,139	800	37.4
1975	915	525	1,440	263	65	1,768	590	33.4
1976	1,350	700	2,050	177	30	2,257	730	32.3
1977	1,150	670	1,820	347	105	2,272	775	34.1
1978	1,240	1,010	2,250	296	140	2,686	1,150	42.8
1979	1,290	950	2,240	271	175	2,686	1,125	41.9
1980	870	530	1,400	280	120	1,800	650	36.1

SOURCE: Michigan Department of Agriculture, Michigan Agricultural Statistics 1980 (Lansing: 1980), p. 38, and special release (1980 data).

a. Stocks for the following year.

TABLE XII-21. COUNTY ESTIMATES OF MAJOR FIELD CROP PRODUCTION IN MICHIGAN: 1980[p]

	Crop							
County or district	Oats (bu)	Barley (bu)	Dry beans (cwt)	Sugarbeets[a] (tons)	Corn (bu)	Wheat (bu)	Soybeans (bu)	Potatoes (cwt)
Alger	16,000	13,000	--	--	--	--	--	--
Baraga	26,800	9,300	--	--	--	6,000	--	--
Chippewa	200,000	10,500	--	--	--	8,200	--	--
Delta	192,000	74,000	--	--	160,000	4,000	--	226,200
Dickinson	43,200	22,800	--	--	43,700	--	--	348,000
Gogebic	8,400	--	--	--	--	--	--	--
Houghton	68,600	6,100	--	--	31,000	--	--	110,400
Iron	41,200	5,900	--	--	--	2,800	--	97,500
Keweenaw	--	--	--	--	--	--	--	--
Luce	12,000	--	--	--	--	--	--	--
Mackinac	79,100	6,200	--	--	25,200	2,800	--	--
Marquette	25,000	21,000	--	--	--	--	--	65,100
Menominee	244,000	156,000	--	--	780,000	15,200	3,060	--
Ontonagon	59,700	5,600	--	--	--	3,700	--	--
Schoolcraft	24,000	13,700	--	--	--	5,300	2,220	80,300
Other[b]	--	--	--	--	--	--	--	85,700
Upper Peninsula (1)	1,040,000	347,000	20,000	--	1,100,000	48,000	6,400	1,013,200
Antrim	40,000	--	--	--	300,000	34,800	--	256,800
Benzie	2,400	--	--	--	68,000	2,600	--	--
Charlevoix	38,000	4,100	--	--	230,000	5,200	--	--
Emmet	65,300	6,600	--	--	186,000	6,600	--	110,000
Grand Traverse	59,000	--	--	--	470,000	46,600	1,500	--
Kalkaska	13,300	--	--	--	96,000	17,400	3,000	83,600
Leelanau	57,400	--	--	--	210,000	11,700	--	--
Manistee	21,000	--	--	--	100,000	19,800	8,400	126,900
Missaukee	270,000	--	--	--	625,000	41,800	--	--
Wexford	53,600	--	--	--	215,000	27,500	1,500	--
Other[b]	--	--	--	--	--	--	--	81,300
Northwest (2)	620,000	19,800	27,000	--	2,500,000	214,000	16,500	658,600

TABLE XII-21. COUNTY ESTIMATES OF MAJOR FIELD CROP PRODUCTION IN MICHIGAN: 1980[p] (cont.)

	Crop							
County or district	Oats (bu)	Barley (bu)	Dry beans (cwt)	Sugarbeets[a] (tons)	Corn (bu)	Wheat (bu)	Soybeans (bu)	Potatoes (cwt)
Alcona	60,700	--	--	--	169,000	42,400	--	--
Alpena	360,000	12,400	--	--	425,000	137,000	3,680	63,800
Cheboygan	77,000	7,500	--	--	95,500	13,000	1,700	--
Crawford	6,200	--	--	--	--	--	--	--
Iosco	104,000	--	--	--	460,000	96,000	16,500	--
Montmorency	66,000	10,900	--	--	80,400	23,600	--	--
Ogemaw	210,000	9,500	--	--	630,000	73,600	9,610	--
Oscoda	17,600	--	--	--	88,700	6,500	--	--
Otsego	101,000	9,500	--	--	108,000	24,200	--	164,000
Presque Isle	450,000	9,800	--	--	90,300	36,200	2,220	384,900
Roscommon	7,500	--	--	--	--	--	--	--
Other[a]	--	--	--	--	--	--	--	22,500
Northeast (3)	1,460,000	61,600	75,000	--	2,150,00	454,000	35,700	635,200
Lake	22,700	--	--	--	96,000	13,800	--	--
Mason	73,600	--	--	--	1,080,000	151,000	5,780	--
Muskegon	87,100	--	--	--	1,100,000	103,500	19,400	--
Newaygo	156,000	--	--	--	1,570,000	94,200	7,200	--
Oceana	50,600	--	--	--	604,000	111,500	2,020	--
West Central (4)	390,000	6,500	6,000	--	4,450,000	474,000	34,400	48,300
Clare	111,000	--	--	--	895,000	108,000	7,600	--
Gladwin	182,000	7,500	46,400	90,300	855,000	198,000	44,200	--
Gratiot	530,000	--	792,000	--	7,200,000	1,114,000	1,420,000	99,000
Isabella	333,000	48,500	232,000	--	4,400,000	811,000	315,000	58,000
Mecosta	160,000	13,800	36,400	--	1,500,000	190,000	9,000	286,200
Midland	121,000	--	287,000	39,800	2,000,000	277,000	400,000	--
Montcalm	354,000	14,200	324,000	--	5,000,000	932,000	238,000	2,275,000
Osceola	240,000	7,500	--	--	650,000	80,000	6,200	--
Other[b]	--	--	--	--	--	--	--	68,000
Central (5)	2,030,000	95,900	1,720,000	136,800	22,500,000	3,710,000	2,440,000	2,786,200

TABLE XII-21. COUNTY ESTIMATES OF MAJOR FIELD CROP PRODUCTION IN MICHIGAN: 1980^p (cont.)

	Crop[a]							
County or district	Oats (bu)	Barley (bu)	Dry beans (cwt)	Sugarbeets (tons)	Corn (bu)	Wheat (bu)	Soybeans (bu)	Potatoes (cwt)
Arenac	245,000	--	212,000	38,300	1,540,000	317,000	151,000	--
Bay	79,000	--	641,000	328,000	4,260,000	683,000	539,000	--
Huron	990,000	57,000	1,220,000	403,700	11,700,000	2,630,000	107,000	--
Saginaw	284,000	20,300	624,000	261,600	5,800,000	1,680,000	3,410,000	--
Sanilac	2,160,000	85,000	673,000	185,000	10,300,000	2,250,000	910,000	--
Tuscola	752,000	226,000	1,060,000	459,400	10,800,000	2,120,000	503,000	--
East Central (6)	4,510,000	393,800	4,430,000	1,676,000	44,400,000	9,680,000	5,620,000	1,619,000
Allegan	322,000	--	--	--	7,600,000	350,000	75,000	255,200
Berrien	126,000	4,400	4,100	--	4,600,000	310,000	786,000	--
Cass	184,000	12,300	--	--	6,200,000	370,000	629,000	--
Kalamazoo	281,000	--	1,500	--	5,900,000	660,000	657,000	--
Kent	474,000	4,600	23,400	--	5,500,000	385,000	57,300	107,500
Ottawa	409,000	7,300	--	--	4,900,000	208,000	32,400	79,800
Van Buren	142,000	9,400	--	--	4,300,000	197,000	310,000	--
Other[b]	--	--	--	--	--	--	--	122,200
Southwest (7)	1,940,000	44,200	29,000	--	39,000,000	2,480,000	2,547,000	564,700
Barry	219,000	9,000	26,800	--	3,500,000	486,000	172,000	--
Branch	290,000	--	--	--	11,000,000	694,000	1,240,000	--
Calhoun	616,000	4,700	3,100	--	8,700,000	853,000	668,000	68,400
Clinton	611,000	9,700	167,000	--	6,300,000	1,620,000	1,510,000	--
Eaton	376,000	4,200	300,000	--	5,800,000	1,310,000	616,000	116,000
Hillsdale	366,000	--	--	--	9,800,000	643,000	1,060,000	--
Ingham	336,000	--	41,700	--	8,100,000	945,000	627,000	--
Ionia	568,000	19,100	186,000	--	6,300,000	1,540,000	577,000	--
Jackson	443,000	--	6,000	--	7,800,000	577,000	130,000	--
St. Joseph	213,000	--	4,000	--	10,700,000	682,000	1,070,000	--
Shiawassee	792,000	4,600	117,000	--	5,100,000	1,260,000	1,930,000	52,900
Other[b]	--	--	--	--	--	--	--	193,300
South Central	4,830,000	62,200	852,000	4,000	83,100,000	10,612,000	9,600,000	377,700

TABLE XII-21. COUNTY ESTIMATES OF MAJOR FIELD CROP PRODUCTION IN MICHIGAN: 1980[p] (cont.)

	Crop							
County or district	Oats (bu)	Barley (bu)	Dry beans (cwt)	Sugarbeets[a] (tons)	Corn (bu)	Wheat (bu)	Soybeans (bu)	Potatoes (cwt)
Genesee	418,000	--	17,100	--	4,000,000	951,000	885,000	204,200
Lapeer	538,000	58,200	165,000	--	5,400,000	841,000	150,000	96,000
Lenawee	325,000	--	--	45,900	12,000,000	2,110,000	3,680,000	167,500
Livingston	329,000	--	5,200	--	5,100,000	329,000	87,000	--
Macomb	218,000	--	16,000	--	2,100,000	323,000	533,000	105,600
Monroe	170,000	--	--	12,500	7,200,000	1,280,000	3,050,000	564,000
Oakland	100,000	--	--	--	1,200,000	137,000	15,000	--
St. Clair	420,000	5,300	85,500	15,050	3,900,000	588,000	1,000,000	--
Washtenaw	746,000	7,800	--	00	6,300,000	843,000	500,000	160,000
Wayne	16,000	--	--	--	600,000	128,000	200,000	--
Other[b]	--	--	--	--	--	--	--	21,800
Southeast (9)	3,280,000	82,000	289,000	74,800	47,800,000	7,530,000	10,100,000	1,319,100
State	20,100,000	1,113,000	7,448,000	1,892,000	247,000,000	35,200,000	30,400,000	9,022,000

SOURCE: Michigan Department of Agriculture, special release.

a. Counties with less than 1,000 acres not published due to change in data collection methods.

b. For potatoes, figure includes counties or districts where no data is given; for all of the other crops, it is not applicable.

p. Preliminary.

TABLE XII-22. MICHIGAN LIVESTOCK INVENTORY, BY DISTRICT AND COUNTY: 1 JANUARY 1981

District or county	All hogs and pigs	Hens and pullets of laying age	All cattle and calves	Milk cows	Beef cows	All sheep and lambs
Alger	100	1,000	3,500	800	800	150
Baraga	--	--	2,100	500	600	--
Chippewa	400	67,500	9,000	2,700	1,800	1,300
Delta	700	3,000	10,200	2,700	2,900	200
Dickinson	200	1,000	3,300	1,100	700	--
Gogebic	--	--	1,400	200	500	--
Houghton	--	10,000	3,600	1,300	600	900
Iron	--	2,000	2,400	300	1,000	--
Keweenaw	--	--	--	--	--	--
Luce	150	7,000	1,500	--	100	--
Mackinac	--	1,000	4,000	1,200	700	50
Marquette	300	1,000	2,200	800	400	--
Menominee	700	18,000	21,100	8,100	2,000	100
Ontonagon	100	--	4,300	800	1,600	200
Schoolcraft	150	--	3,100	100	1,000	--
Upper Peninsula (1)	3,000	112,000	7,700	20,600	14,700	2,900
Antrim	600	44,500	8,300	1,800	1,400	100
Benzie	900	--	1,700	200	500	100
Charlevoix	350	25,000	6,700	1,600	1,100	150
Emmet	150	1,000	7,200	1,300	1,800	150
Grand Traverse	1,000	17,000	5,700	1,000	900	50
Kalkaska	1,600	5,000	1,600	500	200	50
Leelanau	800	55,000	6,500	1,000	700	100
Manistee	500	4,000	3,300	300	1,100	450
Missaukee	2,800	65,000	20,400	7,800	2,000	700
Wexford	1,300	5,000	5,200	1,500	600	150
Northwest (2)	10,000	222,000	66,600	17,000	10,300	2,000

TABLE XII-22. MICHIGAN LIVESTOCK INVENTORY, BY DISTRICT AND COUNTY: 1 JANUARY 1981 (cont.)

District or county	All hogs and pigs	Hens and pullets of laying age	All cattle and calves	Milk cows	Beef cows	All sheep and lambs
Alcona	1,700	29,400	7,200	900	2,500	900
Alpena	1,800	25,000	10,000	2,700	1,900	300
Cheboygan	600	1,400	6,500	1,400	1,800	400
Crawford	--	--	100	--	--	--
Iosco	3,100	1,000	10,400	1,200	2,700	600
Montmorency	100	1,000	3,500	1,100	600	500
Ogemaw	400	1,500	13,500	4,000	1,300	600
Oscoda	200	1,000	3,100	1,000	300	300
Otsego	100	1,000	3,500	700	1,100	50
Presque Isle	400	4,000	11,800	2,400	3,200	50
Roscommon	--	1,000	500	--	300	--
Northeast (3)	8,500	66,500	70,100	15,400	15,700	3,700
Lake	200	2,500	2,400	500	600	150
Mason	900	23,500	11,100	3,300	1,000	1,200
Muskegon	2,500	24,000	13,500	3,900	900	350
Newaygo	5,400	170,000	20,000	7,700	1,700	1,200
Oceana	3,500	47,000	12,500	2,500	1,800	600
West Central (4)	12,500	267,000	59,500	17,900	6,000	3,500
Clare	6,200	1,500	12,400	2,700	2,400	2,000
Gladwin	1,900	3,000	10,200	1,800	2,600	1,000
Gratiot	14,800	225,000	30,000	7,400	2,100	1,600
Isabella	16,000	95,000	35,600	10,400	2,400	600
Mecosta	2,600	47,500	16,900	5,200	2,400	700
Midland	3,900	2,000	7,400	800	1,000	800
Montcalm	8,000	70,000	23,600	9,100	1,600	1,000
Osceola	4,600	22,000	22,000	7,300	2,800	900
Central (5)	58,000	466,000	158,100	44,700	17,300	8,600

TABLE XII-22. MICHIGAN LIVESTOCK INVENTORY, BY DISTRICT AND COUNTY: 1 JANUARY 1981 (cont.)

District or county	All hogs and pigs	Hens and pullets of laying age	All cattle and calves	Milk cows	Beef cows	All sheep and lambs
Arenac	4,200	10,000	10,400	3,400	700	50
Bay	1,800	10,000	5,500	1,600	600	150
Huron	21,000	1,000,000	80,200	19,000	4,300	500
Saginaw	8,000	35,000	17,000	5,400	1,400	1,800
Sanilac	9,000	20,000	76,900	30,000	3,300	1,000
Tuscola	17,000	425,000	25,500	7,600	2,100	1,000
East Central (6)	61,000	1,500,000	215,500	67,000	12,400	4,500
Allegan	63,000	690,000	50,600	15,700	3,500	2,800
Berrien	16,000	145,000	9,500	2,300	1,800	500
Cass	147,000	10,000	17,500	3,100	4,100	2,600
Kalamazoo	25,000	100,000	21,500	3,700	2,200	2,300
Kent	13,000	180,000	42,700	13,400	4,900	1,300
Ottawa	51,000	900,000	43,000	13,800	4,000	700
Van Buren	27,000	145,000	15,500	2,900	2,300	500
Southwest (7)	342,000	2,170,000	200,300	54,900	22,800	10,700
Barry	11,000	97,000	28,300	8,400	3,400	2,900
Branch	37,000	20,000	24,600	5,800	2,600	4,500
Calhoun	30,000	101,000	32,500	7,500	4,600	4,000
Clinton	18,000	32,000	41,200	14,000	2,100	4,500
Eaton	15,000	50,000	23,500	5,700	4,500	5,600
Hillsdale	32,000	90,000	33,200	10,700	3,300	4,100
Ingham	22,000	45,000	31,800	10,500	2,900	4,000
Ionia	21,000	540,000	41,700	13,600	3,800	2,400
Jackson	9,000	19,000	38,600	8,300	5,900	7,900
St. Joseph	38,000	100,000	19,800	4,900	2,500	2,800
Shiawassee	7,000	60,000	28,500	10,800	1,900	1,800
South Central (8)	240,000	1,154,000	343,700	100,200	37,500	44,500

TABLE XII-22. MICHIGAN LIVESTOCK INVENTORY, BY DISTRICT AND COUNTY: 1 JANUARY 1981 (cont.)

District or county	All hogs and pigs	Hens and pullets of laying age	All cattle and calves	Milk cows	Beef cows	All sheep and lambs
Genesee	6,000	43,000	17,900	3,500	2,300	1,600
Lapeer	9,000	7,000	37,100	10,900	2,700	1,800
Lenawee	39,500	65,000	33,800	8,200	1,900	6,700
Livingston	5,500	6,500	22,800	7,200	2,200	3,300
Macomb	3,000	19,000	10,500	3,400	1,200	700
Monroe	12,000	105,000	9,000	1,600	400	1,000
Oakland	2,500	22,000	6,600	1,500	1,500	700
St. Clair	4,400	100,000	24,500	7,000	3,100	600
Washtenaw	11,500	30,000	31,300	8,800	2,700	27,000
Wayne	1,600	45,000	1,000	200	300	200
Southeast (9)	95,000	442,500	194,500	52,300	18,300	43,600
Michigan Total	830,000	6,400,000	1,380,000	390,000	155,000	124,000

SOURCE: Michigan Department of Agriculture, special release.

TABLE XII-23. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN AGRICULTURE AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979

	Labor and proprietors' earnings in agriculture[a]			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Missaukee	29.27	6,160	28.82	7,597
Huron	19.23	30,760	21.89	39,195
Sanilac	14.52	20,607	21.27	34,493
Oceana	25.79	14,890	18.90	11,871
Cass	10.76	18,008	17.31	31,145
Clinton	13.92	16,679	16.57	22,438
Leelanau	26.59	9,710	14.60	4,961
Tuscola	8.81	16,748	13.70	30,208
Gratiot	12.12	24,246	13.19	28,257
Arenac	9.93	3,544	12.70	5,161
Gladwin	4.46	1,665	10.48	4,768
Ionia	8.93	16,892	10.21	20,651
Hillsdale	6.47	11,033	10.01	19,063
Oscoda	5.91	821	8.88	1,343
Van Buren	11.30	24,103	8.67	20,396
Allegan	10.22	26,015	8.52	24,051
Montcalm	5.51	9,996	8.31	16,299
St. Joseph	4.69	12,824	8.03	25,367
Ogemaw	3.21	1,382	7.95	4,206
Lapeer	6.10	13,341	7.85	18,502
Branch	4.31	9,268	7.77	18,790
Barry	5.79	7,228	7.72	10,974
Eaton	3.82	6,924	7.51	15,304
Mecosta	6.08	6,350	6.91	7,990
Osceola	5.57	3,343	6.80	4,563
Alcona	--	(-102)	6.24	1,240
Antrim	8.23	4,342	6.17	3,652
Newaygo	10.07	9,543	5.94	5,989
Presque Isle	2.13	1,061	5.94	3,400
Isabella	7.27	15,068	5.84	13,297
Benzie	8.50	3,154	5.70	2,335
Menominee	3.72	3,603	5.16	5,658
Mason	4.52	4,909	4.23	5,216
Lake	3.69	445	4.21	564
Montmorency	1.69	345	4.11	883

TABLE XII-23. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN AGRICULTURE AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979 (cont.)

	Labor and proprietors' earnings in agriculture[a]			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Shiawassee	3.69	8,521	3.81	10,231
Clare	1.85	478	3.66	2,326
Lenawee	1.37	5,966	3.61	17,803
Bay	1.71	9,926	2.89	18,252
Monroe	1.49	6,954	2.60	13,132
Livingston	2.17	5,294	2.53	7,264
Alger	1.04	311	2.50	825
Luce	--	(-230)	2.39	975
Iron	.87	392	2.35	1,164
Berrien	3.07	30,832	2.20	23,417
Manistee	3.15	3,111	2.16	2,339
Saginaw	1.42	24,687	2.14	40,386
Grand Traverse	3.40	11,400	2.05	7,779
Cheboygan	1.44	1,064	2.04	1,746
Emmet	.30	328	2.03	2,542
Calhoun	1.36	13,352	2.00	21,439
Charlevoix	.68	597	1.97	1,937
Ottawa	3.03	24,163	1.92	17,620
Delta	.80	1,336	1,74	3,234
Chippewa	.18	180	1.67	1,778
Wexford	1.22	1,436	1.66	2,187
Schoolcraft	--	(-134)	1.62	589
Dickinson	.30	462	1.41	2,423
Baraga	.92	297	1.43	502
Houghton	.96	1,162	1.30	1,745
Mackinac	.25	98	1.28	545
Iosco	.26	307	1.28	1,635
Gogebic	.64	377	1.23	805
Otsego	.71	540	1.13	999
Kalamazoo	.93	13,912	1.07	18,177
Jackson	.43	3,833	1.03	10,286
Ontonagon	--	(-201)	.96	547
Midland	.95	5,729	.92	6,208
Kalkaska	1.20	470	.87	378
Kent	.90	28,350	.70	25,497

TABLE XII-23. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN AGRICULTURE AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979 (cont.)

	Labor and proprietors' earnings in agriculture[a]			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Washtenaw	.31	7,801	.67	18,491
Muskegon	.78	6,981	.61	6,032
Ingham	.36	9,480	.58	17,015
Alpena	.12	209	.55	989
Roscommon	--	(-125)	.37	166
St. Clair	1.69	9,404	.33	1,942
Macomb	.28	12,654	.25	12,113
Genesee	.18	7,330	.17	7,070
Marquette	--	(-29)	.13	589
Oakland	--	4,727	.05	4,519
Wayne	.02	4,413	.02	4,262
Crawford	.00	00	.00	00
Keweenaw	.00	00	.00	00
Michigan	.98	623,075	1.17	811,727
United States	2.40	31,775,000	2.52	37,394,000

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

NOTE: Counties are ranked according to this sector's relative contribution to total labor and proprietors' earnings during 1979 (next-to-last column). These numbers pertain to earning generated within the county, irrespective of the residence of the people who received them. For a complete tabulation of earnings at the state level, see Tables VI-2 and VI-3. The earnings residence adjustment for all industries is shown in Table VI-12.

[a] Negative earnings can occur as a result of net losses to farm proprietors being greater than net wages and salaries paid to farm employees.

TABLE XII-24. RANKING OF MICHIGAN COUNTIES ACCORDING TO PERCENTAGE CHANGE IN LABOR AND PROPRIETORS' EARNINGS IN AGRICULTURE; 1978-1979

	Percentage change			Percentage change	
County	1974-1979	1978-1979	County	1974-1979	1978-1979
Chippewa	30	888	Livingston	45	37
Emmet	124	675	Osceola	32	36
Mackinac	49	456	Clinton	17	35
Iosco	94	433	Kalamazoo	118	31
Dickinson	59	424	Huron	-15	27
Clare	18	387	Mecosta	12	26
Alpena	-23	373	Lake	76	24
Charlevoix	46	224	Missaukee	92	23
Presque Isle	61	220	Ionia	25	22
Ogemaw	37	204	Shiawassee	-22	20
Lenawee	16	198	Gratiot	-9	17
Iron	55	197	Midland	-26	8
Gladwin	140	186	Mason	-10	6
Jackson	141	168	Wayne	53	-3
Alger	260	165	Genesee	-14	-4
Montmorency	22	156	Macomb	25	-4
Delta	4	142	Oakland	41	-4
Washtenaw	114	137	Allegan	35	-8
Eaton	39	121	Kent	39	-10
Gogebic	59	114	Isabella	-13	-12
Branch	149	103	Muskegon	11	-14
St. Joseph	293	98	Van Buren	36	-15
Monroe	24	89	Antrim	7	-16
Otsego	31	85	Kalkaska	176	-20
Bay	-27	84	Oceana	0	-20
Tuscola	-27	80	Berrien	5	-24
Ingham	106	79	Manistee	1	-25
Cass	203	73	Benzie	3	-26
Hillsdale	77	73	Ottawa	25	-27
Baraga	202	69	Grand Traverse	1	-32
Sanilac	8	67	Newaygo	-13	-37
Cheboygan	98	64	Leelanau	-34	-49
Oscoda	45	64	St. Clair	-76	-79
Saginaw	-4	64	Crawford	-100	-100
Montcalm	7	63	Keweenaw	-100	-100
Calhoun	168	61	Roscommon	-23	-233
Menominee	27	57	Ontonagon	895	-372
Barry	59	52	Luce	403	-524
Wexford	54	52	Schoolcraft	41	-540
Houghton	51	50	Alcona	221	-1,316
Arenac	0	46	Marquette	76	-2,131
Lapeer	17	39	Michigan	21	30

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

TABLE XII-25. MICHIGAN COUNTIES RANKED ACCORDING TO 1979 CASH RECEIPTS FROM TOTAL MARKETINGS: 1978 AND 1979

(Millions of dollars)

County	1978	1979	County	1978	1979
Huron	109	161	Oakland	18	22
Sanilac	85	113	Mason	16	19
Allegan	86	111	Missaukee	14	19
Tuscola	75	106	Menominee	14	18
Saginaw	70	101	Arenac	13	18
Lenawee	68	100	Osceola	13	17
Ottawa	77	92	Wayne	13	15
Gratiot	60	88	Antrim	12	13
Kent	68	82	Gladwin	8	11
Berrien	70	76	Clare	8	11
Van Buren	64	76	Manistee	9	10
Clinton	50	71	Presque Isle	7	10
Calhoun	47	68	Ogemaw	8	10
Lapeer	52	67	Delta	7	9
Ionia	49	67	Alpena	7	9
Cass	44	67	Benzie	6	7
Hillsdale	43	61	Dickinson	5	6
Ingham	46	61	Iosco	5	6
Kalamazoo	42	60	Chippewa	4	6
Isabella	40	59	Charlevoix	4	6
Washtenaw	42	58	Alcona	3	5
St. Joseph	39	58	Emmet	4	5
Monroe	42	57	Wexford	3	4
Bay	41	57	Houghton	3	4
Branch	38	56	Cheboygan	3	4
Montcalm	39	54	Oscoda	3	4
St. Clair	37	52	Montmorency	2	3
Jackson	36	52	Otsego	2	3
Eaton	34	49	Mackinac	2	2
Shiawassee	35	48	Iron	2	2
Genesee	29	41	Ontonagon	2	2
Oceana	33	36	Marquette	2	2
Macomb	30	36	Alger	2	2
Barry	26	36	Kalkaska	1	2
Newaygo	28	33	Lake	1	2
Livingston	23	31	Gogebic	1	1
Mecosta	20	28	Baraga	1	1
Muskegon	22	26	Luce	1	1
Leelanau	23	24	Schoolcraft	1	1
Midland	15	24	Roscommon	(a)	(a)
Grand Traverse	22	22	Michigan	2,128	2,860

SOURCE: Bureau of Economic Analysis, Regional Economics Information System

a. Less than $500,000.

b. Keweenaw and Crawford counties have no cash receipts reported.

TABLE XII-26. MICHIGAN COUNTIES RANKED ACCORDING TO 1979 CASH RECEIPTS FROM CROPS MARKETINGS: 1978 AND 1979

(Millions of dollars)

County	1978	1979	County	1978	1979
Saginaw	54	79	Mason	8	9
Tuscola	51	73	Arenac	7	9
Huron	46	66	Livingston	6	8
Berrien	60	62	Manistee	8	8
Bay	36	51	Antrim	8	8
Gratiot	35	51	Mecosta	6	7
Van Buren	47	49	Wexford	4	5
Lenawee	32	45	Benzie	5	4
Kent	39	42	Presque Isle	3	4
Allegan	35	40	Dickinson	2	4
Monroe	31	40	Gladwin	3	4
Sanilac	28	39	Delta	2	2
Ottawa	36	38	Missaukee	2	2
Montcalm	23	32	Osceola	2	2
Oceana	26	26	Menominee	2	2
Eaton	18	26	Clare	1	2
Calhoun	19	26	Alpena	1	2
Lapeer	22	26	Ogemaw	1	2
Ionia	19	25	Emmet	1	2
Kalamazoo	20	25	Cheboygan	1	1
Macomb	21	24	Iron	1	1
St. Joseph	17	24	Houghton	1	1
Ingham	18	24	Iosco	1	1
Branch	17	23	Chippewa	1	1
Hillsdale	15	22	Kalkaska	1	1
Shiawassee	16	22	Marquette	1	1
Clinton	15	22	Charlevoix	1	1
Washtenaw	16	21	Otsego	1	1
Cass	15	20	Alcona	1	1
Grand Traverse	18	17	Montmorency	(a)	(a)
Leelanau	18	17	Ontonagon	(a)	(a)
St. Clair	12	16	Lake	(a)	(a)
Newaygo	14	16	Luce	(a)	(a)
Jackson	12	16	Schoolcraft	(a)	(a)
Muskegon	13	14	Alger	(a)	(a)
Genesee	10	14	Mackinac	(a)	(a)
Isabella	10	14	Oscoda	(a)	(a)
Midland	10	14	Roscommon	(a)	(a)
Wayne	12	13	Baraga	(a)	(a)
Oakland	12	13	Gogebic	(a)	(a)
Barry	8	11	Michigan	1,059	1,338

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

a. Less than $500,000.

b. Keweenaw and Crawford counties have no cash receipts reports.

TABLE XII-27. MICHIGAN COUNTIES RANKED ACCORDING TO 1979 CASH RECEIPTS FROM LIVESTOCK AND LIVESTOCK PRODUCTS MARKETINGS: 1978 AND 1979

(Millions of dollars)

County	1978	1979	County	1978	1979
Huron	64	94	Ogemaw	7	9
Sanilac	56	73	Arenac	6	9
Allegan	50	71	Clare	6	9
Lenawee	36	55	Oakland	6	9
Ottawa	41	53	Midland	6	9
Clinton	34	49	Alpena	6	8
Cass	28	47	Delta	5	7
Isabella	30	45	Gladwin	5	7
Calhoun	28	42	Leelanau	5	7
Ionia	30	42	Antrim	4	6
Lapeer	29	41	Presque Isle	4	6
Kent	29	40	Bay	4	6
Hillsdale	28	39	Iosco	4	5
Gratiot	25	37	Chippewa	3	5
Ingham	27	37	Charlevoix	4	5
Washtenaw	26	37	Grand Traverse	3	4
Jackson	25	36	Alcona	3	4
St. Clair	25	36	Emmet	3	3
Kalamazoo	23	35	Oscoda	2	3
Branch	22	33	Dickinson	2	3
St. Joseph	22	33	Houghton	2	3
Tuscola	24	33	Montmorency	2	3
Genesee	18	28	Cheboygan	2	3
Van Buren	17	27	Mackinac	2	2
Shiawassee	20	26	Wexford	1	2
Barry	18	25	Ontonagon	1	2
Eaton	16	24	Alger	1	2
Livingston	17	23	Otesgo	1	2
Montcalm	16	22	Wayne	1	2
Saginaw	16	21	Manistee	1	2
Mecosta	13	19	Benzie	1	2
Newaygo	14	18	Gogebic	1	1
Monroe	11	17	Lake	1	1
Missaukee	12	16	Marquette	1	1
Menominee	13	15	Baraga	1	1
Berrien	10	15	Iron	1	1
Osceola	11	14	Kalkaska	1	1
Macomb	9	13	Schoolcraft	(a)	1
Muskegon	9	12	Luce	(a)	1
Mason	7	10	Roscommon	(a)	(a)
Oceana	7	10	Michigan	1,069	1,522

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.
a. Less than $500,000.
b. Keweenaw and Crawford counties have no cash receipts reported.

TABLE XII-28. PULPWOOD PRODUCTION IN MICHIGAN, BY SPECIES: 1972-1980

(Thousand standard cords)

Item[a]	1972	1973	1974	1975	1976	1977	1978	1979	1980
Aspen	601	672	756	446	536	608	672	709	705
Balsam fir	60	68	74	74	75	94	87	85	109
Pine[b]	229	211	262	235	281	262	280	350	267
Spruce	38	46	40	45	32	47	43	39	58
Birch	36	59	85	36	69	67	93	109	103
Hemlock	50	58	53	50	79	62	48	45	58
Tamarack	3	5	2	2	1	3	1	2	6
Misc. hardwoods	326	376	228	221	333	352	407	464	128
Residue and chips	161	223	196	182	163	164	134	152	n.a.
TOTAL	1,508	1,720	1,910	1,291	1,406	1,661	1,766	1,955	n.a.

SOURCE: Michigan Department of Natural Resources, special release.

a. Wood received by companies which manufacture paper, paperboard, hardboard, insulation board, and particleboard.

b. Includes white, red, and jack pine.

TABLE XII-29. SELECTED FISHERY STATISTICS FOR MICHIGAN: 1960-1979

Year	Commercial landings Quantity (000 lbs)	Commercial landings Value[a] ($000)	Number of plants involved[b]	Value of mfd. fishery products ($000)
1960	25,021	2,997	92	2,576
1961	24,535	2,931	67	4,104
1962	22,121	2,479	57	4,205
1963	20,326	2,323	66	3,900
1964	19,769	2,522	66	2,023
1965	19,748	2,757	66	2,587
1966	21,284	2,568	62	2,275
1967	29,221	2,846	64	2,357
1968	23,953	2,832	59	2,344
1969	21,948	2,723	56	4,578
1970	21,169	2,875	52	n.a.
1971	19,137	2,671	49	4,419
1972	14,213	2,985	47	8,801
1973	16,869	3,688	47	5,300
1974	15,454	3,926	47	n.a.
1975	12,256	3,653	46	n.a.
1976	14,438	4,145	44	n.a.
1977	11,626	3,275	n.a.	n.a.
1978	11,158	3,529	13	n.a.
1979	10,945	3,555	n.a.	n.a.

SOURCE: National Oceanic and Atmospheric Administration, *Fishery Statistics of the United States*, 1959-1973 (Washington, D.C.: annually), Statistical Digest no. 67, p. 306 (1973), and *Fisheries of the United States, 1977* (Washington, D.C.: 1978), Current Fishery Statistics, 7500, pp. 4, 80 (1978).

a. Amount paid to fishermen. b. Wholesale and mfg. firms only.

n.a.: not available.

TABLE XII-30. PULPWOOD PRODUCTION IN MICHIGAN'S UPPER AND LOWER PENINSULAS, BY SPECIES: 1978 AND 1979

	1978			1979		
Species[a]	Upper peninsula	Lower peninsula	State total	Upper peninsula	Lower peninsula	State total
Aspen	331,491	340,716	672,207	329,614	379,786	709,400
Balsam fir	86,420	922	87,342	84,139	1,150	85,289
Birch	74,210	18,521	92,731	87,056	21,513	108,569
Maple	138,958	66,290	205,248	175,182	74,861	250,043
Oak	1,664	106,707	108,371	2,862	102,731	105,593
Other hardwoods	66,666	20,493	87,159	78,528	21,786	100,314
Cedar	6,112	0	6,112	8,175	--	8,175
Hemlock	48,158	255	48,413	344,906	--	44,906
Pine	136,067	143,720	279,787	166,885	183,110	349,995
Spruce	42,217	328	42,545	37,841	845	38,686
Tamarack	1,750	0	1,750	2,371	--	2,371
TOTAL ROUNDWOOD	933,713	697,952	1,631,665	1,017,559	785,782	1,803,341
Residues[b] used as pulpwood:						
Softwood	8,240	8,165	16,405	8,636	2,367	11,003
Hardwood	56,140	61,422	117,562	56,620	84,136	140,756
Total residues	64,380	69,587	133,967	65,256	86,503	151,759
TOTAL ALL PULPWOOD	998,093	767,539	1,765,632	1,082,815	872,285	1,955,100

SOURCE: Michigan Department of Natural Resources, special release.

a. Wood received by companies which manufacture paper, paperboard, hardboard, insulation board, and particleboard.

b. Slabs, edgings, veneer cores, and so forth.

XIII. MINING

Each establishment is classified on the basis of its major economic activity. Those primarily engaged in mining are tabulated in the Census of Mineral Industries, where they are further classified on the basis of the principal mineral produced or, if there is no production, on the basis of the principal mineral for which exploration or development is in progress. Mineral processing, not in conjunction with extraction, is classified in manufacturing. A major difference between census statistics and those published by the U.S. Bureau of Mines and the Geological Survey Division of the Michigan Department of Natural Resources is the exclusion of cement manufacturing in the former and its inclusion in the latter. Another difference stems from the treatment of government-owned operations, such as gravel pits mined by county road crews. Census statistics would exclude those establishments whereas the Bureau of Mines and the Geological Survey Division would not. For the most part, the Geological Survey Division and Bureau of Mines are interested in reporting mineral production, irrespective of mine ownership. Census statistics focus on the economic nature of establishments.

Companies with operations at more than one location must report separately for each establishment; the tabulations are based on these reports. Establishments not engaged in mineral extraction are classified in another industry. For example, the Michigan oil wells of an integrated petroleum company would be reported as a mineral establishment, but the refinery would be a manufacturing establishment, and company-operated retail or whosesale outlets for petroleum products would be classified in retail or wholesale trade. A mining establishment generally represents a unit operation even though there may be several pits, shafts, or wells. The operations of natural gas plants are included in mining inasmuch as these engage in separating hydrocarbons for use or further processing elsewhere. Establishments without paid employees and with shipments or expenditures totaling less than $500 were excluded.

The Bureau of Mines, U.S. Department of Interior, annually publishes Mineral Yearbook. A chapter entitled "The Mineral Industry of Michigan" is prepared in cooperation with the Geological Survey Division, Michigan Department of Natural Resources. The Geological Survey Division issues occasional releases dealing with Michigan's mineral industries. It also publishes Michigan's Oil and Gas Fields and a directory, Michigan Mineral Producers.

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TABLE XIII-1. AVERAGE WAGE AND SALARY EMPLOYMENT AND WEEKLY HOURS AND EARNINGS OF PRODUCTION WORKERS IN MICHIGAN AND THE UNITED STATES MINING ESTABLISHMENTS: 1956-1980

		WEEKLY					
		Hours		Earnings		Hourly Earnings	
Year	Employment (000)	Metallic	Nonmetallic	Metallic	Nonmetallic	Metallic	Nonmetallic
			MICHIGAN				
1956	16.5	42.3	48.7	102.58	113.57	2.43	2.33
1957	16.8	40.2	47.7	105.48	115.91	2.62	2.43
1958	14.5	36.8	42.4	98.88	105.58	2.69	2.49
1959	13.8	42.5	48.0	121.17	127.63	2.85	2.66
1960	15.5	40.3	41.6	116.27	111.24	2.89	2.67
1961	13.4	40.4	49.7	115.62	139.21	2.86	2.80
1962	13.1	40.6	56.9	118.23	164.95	2.91	2.90
1963	12.9	44.1	53.1	128.11	160.04	2.91	3.01
1964	13.0	42.3	44.8	129.65	133.77	3.07	2.99
1965	13.4	41.3	45.4	130.30	139.70	3.16	3.08
1966	13.5	43.2	45.5	137.68	140.31	3.19	3.08
1967	12.8	45.1	46.9	146.08	126.54	3.24	2.70
1968	12.6	42.2	44.5	145.29	129.14	3.44	2.90
1969	12.2	43.7	44.6	162.52	161.05	3.72	3.61
1970	11.8	43.6	44.1	166.99	167.84	3.83	3.81
1971	11.1	42.5	44.5	173.91	184.94	4.09	4.16
1972	12.0	43.1	40.9	197.21	186.80	4.58	4.56
1973	12.9	42.6	44.0	208.83	216.70	4.90	4.93
1974	13.4	43.7	43.7	244.55	235.93	5.60	5.38
1975	13.8	40.2	42.5	268.74	275.06	6.69	6.47
1976	13.2	42.4	44.2	288.75	286.02	6.82	6.46
1977	12.1	42.2	43.3	307.51	300.37	7.29	6.94
1978	13.3	41.8	44.3	351.71	344.30	8.41	7.77
1979	13.2	41.9	43.0	394.36	370.06	9.41	8.61
1980	12.5	39.5	42.3	418.54	390.51	10.60	9.23
			UNITED STATES[a]				
1956	822	42.1	44.4	95.57	83.47	2.27	1.88
1957	828	40.7	43.7	97.27	85.65	2.39	1.96
1958	751	38.6	43.3	[illegible]	88.33	2.46	2.04
1959	732	40.3	44.4	[illegible]	94.13	2.55	2.12
1960	712	41.8	43.7	111.19	96.58	2.66	2.21
1961	672	41.4	43.9	113.44	100.09	2.74	2.28
1962	650	41.5	44.3	117.45	105.43	2.83	2.38
1963	635	41.2	44.6	118.66	108.38	2.88	2.43
1964	634	41.4	45.1	122.54	111.85	2.96	2.48
1965	632	41.6	45.7	127.30	117.45	3.06	2.57
1966	627	42.2	45.7	133.77	123.39	3.17	2.7
1967	613	42.1	45.2	136.40	128.82	3.24	2.8
1968	606	43.3	44.9	148.09	136.50	3.42	3.04
1969	619	43.1	45.6	156.88	149.11	3.64	3.27
1970	623	43.1	44.7	167.23	155.11	3.88	3.47
1971	609	42.8	44.9	176.34	166.13	4.12	3.70
1972	628	41.4	44.7	188.78	176.57	4.56	3.95
1973	642	41.7	45.5	201.83	192.01	4.84	4.22
1974	697	41.4	45.0	225.22	202.50	5.44	4.50
1975	752	40.7	43.5	249.49	215.33	6.13	4.95
1976	779	41.0	44.2	277.16	236.91	6.76	5.36
1977	813	40.8	44.6	297.02	259.13	7.28	5.81
1978	851	41.3	44.8	339.90	283.58	8.23	6,33
1979	958	41.2	45.0	381.92	310.50	9.27	6.90
1980	1,020	40.5	43.6	415.94	327.87	10.27	7.52

SOURCE: Michigan Employment Security Commission Special release, and Bureau of Labor Statistics, Employment and Earnings, (Washington, D.C.: Monthly), April 1981, Tables B-1 and B-20.

a. Nonmetallic figures for the U.S. does not include "Fuel".

TABLE XIII-2. SELECTED DATA FOR MINERAL INDUSTRIES IN MICHIGAN AND THE UNITED STATES: 1954, 1958, 1963, 1967, 1972, AND 1977

	Establishments Total (Number)		All employees[a]				Value added in Mining ($1,000,000)	
			Number (0,000)		Payroll ($1,000,000)			
Year	Mich.	U.S.	Mich.	U.S.	Mich.	U.S.	Mich.	U.S.
1954	567	37,641	16.4	787.1	76.3	3,394.8	149.1	11,558.7[d]
1958	539	36,392	14.3	733.9	73.2	3,749.0	158.0	13,385.2
1963	691[b]	38,651[c]	12.2	615.6	75.2	3,742.5	223.1	15,910.0
1967	459[b]	28,579[c]	12.2	567.3	88.0	4,186.8	289.9	19,330.2
1972	409[b]	25,269[c]	11.4	595.1	119.9	6,225.5	306.3	26,470.6
1977	499[b]	31,359[c]	11.3	798.8	203.3	13,166.8	938.9	68,013.1

SOURCE: Bureau of the Census, 1977 Census of Mineral Industries, Geographic Area Series (Washington, D.C.: March 1981), MIC77-A-3, Table 1 and general summary.

a. For crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments, the number of production, development, and exploration workers was estimated from reported figures for hours worked. No data was obtained on other employees at such operations; hence, the same employment and payroll figures are included for all employees as for production, development, and exploration workers.

b. In 1977, 1972, and 1967 data for companies without paid employees were excluded from the census of mineral industries. In 1963, there were 854 single-unit establishments without paid employees in the states covered by this report. In the 1963 census, establishments without paid employees for mining as a whole accounted for approximately 3 percent of value added.

c. In 1977, 1972, and 1967, data for single-unit establishments without paid employees were excluded from the census. In 1963, there were 6,543 single-unit establishments without paid employees in the United States. In the 1963 census, establishments without paid employees for mining as a whole accounted for approximately 3 percent of value added.

d. Excludes data for uranium-radium-vanadium ores industry.

TABLE XIII-3. VALUE OF MICHIGAN FUEL AND METALLIC AND NONMETALLIC MINERAL PRODUCTION: 1945-1980

(In thousands of dollars)

Year	Fuel	Metallic	Nonmetallic[a]	Total
1945	28,607	43,545	55,894	128,046
1946	31,129	35,325	67,228	133,682
1947	37,847	56,943	75,479	170,269
1948	51,807	71,636	90,672	214,116
1949	48,082	65,102	94,403	207,608
1950	45,475	84,212	108,787	238,474
1951	40,279	90,279	127,052	257,530
1952	38,093	94,763	134,234	267,089
1953	37,333	105,236	145,125	287,693
1954	35,667	82,525	168,375	286,550
1955	33,623	145,380	192,354	371,357
1956	32,538	157,219	216,806	406,563
1957	31,785	144,235	230,790	406,810
1958	29,701	102,119	217,703	349,523
1959	33,719	97,363	254,240	385,322
1960	50,629	134,098	250,402	435,130
1961	62,144	125,956	255,164	443,263
1962	58,127	124,431	255,131	437,689
1963	58,099	155,277	272,208	485,583
1964	55,656	188,979	300,377	545,011
1965	54,685	204,241	30,875	526,801
1966	54,606	211,355	323,628	589,589
1967	53,371	207,975	334,104	595,449
1968	56,600	213,930	347,476	612,826
1969	55,580	248,945	354,904	659,445
1970	51,326	249,332	383,460	684,118
1971	49,292	226,325	380,166	655,783
1972	57,847	233,331	407,333	698,511
1973	80,194	276,526	460,230	816,950
1974	190,134	369,225	497,942	1,057,301
1975	327,456	425,201	492,695	1,245,352
1976	435,234	487,172	560,838	1,483,244
1977	506,965	418,667	612,088	1,537,719
1978	594,802	627,266	730,821	1,952,889
1979	803,378	697,342	823,159p	2,323,879
1980	1,050,000p	731,126	749,534p	2,530,710

SOURCE: Michigan Department of Natural Resources, special release.

a. Includes cement, classified in manufacturing by the U.S. Bureau of the Census.

p: Preliminary.

TABLE XIII-4. VALUE OF MICHIGAN MINERAL PRODUCTION, BY PRODUCT: 1973-1980

(In thousands of dollars)

Mineral	1973	1974	1975	1976	1977	1978	1979[p]	1980[p]
Iron ore	180,158	257,944	340,852	427,339	357,565	576,359	613,174	652,599
Cement	129,627	146,823	138,357	153,751	176,701	225,519	268,513	242,940
Petroleum	59,573	154,952	262,352	329,637	360,995	427,881	524,257	664,000
Sand & gravel	74,231	82,710	73,397	78,372	97,503	108,832	116,597	98,700
Nat. salines[a]	121,086	112,350	116,876	124,122	138,712	169,474	185,218	182,347
Copper	94,193	108,761	82,093	59,113	59,115	49,071	79,195	75,733
Salt	53,732	62,055	67,240	79,740	78,864	83,263	82,540	76,875
Stone[b]	40,768	47,625	46,461	63,517	66,331	96,789	99,998	85,568
Lime	26,055	30,036	36,540	39,686	42,015	45,814	43,373	37,603
Nat. gas	17,306	35,182	65,104	106,739	145,970	166,921	279,121	386,000
Gypsum (crude)[c]	8,538	7,258	5,936	8,760	10,769	18,996	14,633	13,573
Clay & shale[d]	3,304	4,074	3,580	4,741	5,126	6,993	7,430	6,495
Nat. gas liquids[e]	3,314	(f)	(f)	(f)	(f)	(f)	(f)	(f)
Peat	2,172	3,810	3,206	3,714	4,754	3,843	4,847	5,473
Silver	(g)	(g)	2,256	1,223	1,987	1,836	4,973	2,795
Marl	79	258	153	156	63	59	n.a.	n.a.
Miscellaneous	2,811	3,463	872	936	856	1,060	10	10
TOTAL	816,950	1,057,301	1,245,274	1,483,244	1,537,621	1,982,710	2,323,879	2,530,711

SOURCE: Michigan Department of Natural Resources, Michigan Mineral Producers (Lansing: annually), and pecial release.

NOTE: 1977 and 1978 totals adjusted to avoid double counting: stone used in the manufacture of cement and lime in Michigan; sandstone crushed to manufacture industrial sand; shale, clay, gypsum, and sand used in cement manufacturing in Michigan; samd amd grave; sand and gravel includes industrial sand; 1979 and 1980 stone includes marl.

a. Bromine, magnesium compounds, calcium-magnesium chloride, potash, and iodine.

b. Does not include limestone and dolomite used in the manufacture of cement and lime (1976 only that used within Michigan has been deducted).

c. 1976 value of gypsum used in Michigan to manufacture cement has been deducted.

d. Title brick, pottery, clay used for cement, lightweight aggregate, and miscellaneous. (1976 value used in Michigan for cement has been deducted).

e. Includes liquids stripped from gas delivered via interstate pipeline.

f. Included in petroleum and natural gas according to Proration Unit.

g. Included in miscellaneous.

p. Preliminary

n.a.: not available.

TABLE XIII-5. QUANTITY OF SELECTED MINERALS PRODUCED IN MICHIGAN: 1980

Minerals	Units of measurement	1973	1974	1975	1976	1977	1978	1979	1980[p]
Iron ore	1,000 long tons[a]	12,314	11,531	14,043	15,688	12,016	18,115	17,081	16,267
Cement	1,000 short tons[b]	6,489	6,120	4,809	5,331	5,816	6,223	5,944	4,878
Petroleum	1,000 barrels (42 gal.)	14,530	18,102	24,420	30,421	32,965	34,667	34,862	33,900
Sand & gravel	1,000 short tons	62,555	60,073	47,051	47,318	46,606	52,135	50,169	40,300
Nat. salines[c]	1,000 short tons	1,107	1,407	1,085	1,193	1,267	1,365	n.a.	n.a.
Copper	1,000 pounds	151,779	131,038	147,380	86,930	85,961	78,301	87,470	71,540
Salt	1,000 short tons	4,818	4,445	3,895	4,189	3,947	3,698	3,080	2,752
Stone[d]	1,000 short tons	26,954	28,140	23,820	41,418	40,529	40,719	39,818	30,509
Lime	1,000 short tons	1,545	1,528	1,434	1,456	1,347	1,291	1,057	807
Natural gas	1,000 thou. cu. ft.	43,704	69,806	102,664	120,250	133,227	150,535	150,731	159,000
Gypsum (crude)	1,000 short tons	1,882	1,482	1,224	1,837	1,924	2,765	2,562	2,089
Clay & shale[e]	1,000 short tons	2,151	2,161	1,818	1,934	2,007	2,122	2,072	1,968
Natural gas liquids[f]	1,000 gallons	48,742	55,230	218,888	(g)	(g)	(g)	(g)	(g)
Peat	1,000 short tons	232	244	245	300	291	219	258	244
Silver	1,000 fine oz.	654	537	632	289	447	354	475	159
Marl	1,000 short tons	73	151	85	66	29	25	(h)	(h)

SOURCE: Michigan Department of Natural Resources, Michigan Mineral Producers (Lansing: annually, through 1978), special release, and U.S. Bureau of Mines.

a. Long tons (2,240 pounds).
b. Short tons (2,000 pounds).
c. Bromine, magnesium compounds, calcium-magnesium chloride, potash, and iodine.
d. Does not include limestone and dolomite used in the manufacture of cement and lime prior to 1976.
e. Tile brick, pottery, clay used for cement, lightweight aggregate, and miscellaneous.
f. Includes liquids stripped from gas delivered via interstate pipeline.
g. Natural gas liquids are figured into petroleum and natural gas production.
h. Marl included with stone.
p: Preliminary
n.a.: not available.

TABLE XIII-6. VALUE OF MINERALS PRODUCED IN MICHIGAN, BY COUNTY: 1974-1978

(In thousands of dollars)

County	1974	1975	1976	1977	1978
Alcona	134	124	187	46	232
Alger	88	77	207	44	0
Allegan	1,824	2,476	2,292	2,295	3,094
Alpena	66,819	61,659	66,941	78,411	106,779
Antrim	786	3,697	3,401	5,397	6,395
Arenac	2,271	2,638	2,831	3,229	3,230
Baraga	126	110	183	271	129
Barry	845	808	872	999	620
Bay	11,630	11,807	13,112	13,789	16,567
Benzie	23	33	35	385	713
Berrien	4,487	4,691	5,095	7,050	6,956
Branch	355	488	217	437	441
Calhoun	11,772	17,920	22,016	24,915	24,636
Cass	1,046	1,358	987	1,188	1,762
Charlevoix	19,506	21,278	28,074	29,318	34,123
Cheboygan	179	188	166	206	585
Chippewa	5,903	5,203	6,129	7,029	8,407
Clare	3,107	3,931	3,751	4,029	4,713
Clinton	1,132	1,805	1,488	1,905	2,713
Crawford	5,689	9,737	11,573	14,241	20,775
Delta	223	581	621	597	617
Dickinson	40,009	49,768	55,526	63,289	63,843
Eaton	2,387	4,980	8,202	9,427	10,188
Emmet	13,959	16,025	15,968	16,865	18,821
Genesee	692	430	505	670	620
Gladwin	2,182	2,558	2,736	2,988	3,102
Gogebic	162	249	158	242	445
Grand Traverse	12,274	36,121	66,929	97,816	116,591
Gratiot	8,398	11,667	11,114	10,243	8,857
Hillsdale	15,216	17,619	16,388	16,832	16,338
Houghton	332	1,375	2,839	298	407
Huron	1,754	1,800	1,746	1,957	2,357
Ingham	20,746	29,598	29,809	29,722	26,289
Ionia	397	627	407	200	378
Iosco	6,556	5,569	9,728	9,794	17,216
Iron	6,668	3,232	4,276	5,358	2,537
Isabella	1,905	1,918	1,917	2,494	2,520
Jackson	6,804	6,991	6,833	6,807	6,955
Kalamazoo	6,210	1,452	1,668	2,086	1,710
Kalkaska	36,919	60,218	59,719	59,101	75,251
Kent	6,011	5,035	5,369	15,858	8,531
Keweenaw	23	31	36	47	0

TABLE XIII-6. VALUE OF MINERALS PRODUCED IN MICHIGAN, BY COUNTY: 1974-1978 (cont.)

(In thousands of dollars)

County	1974	1975	1976	1977	1978
Lake	777	973	960	1,087	1,115
Lapeer	3,750	2,831	3,654	4,063	3,714
Leelanau	371	299	211	218	815
Lenawee	984	1,043	1,021	1,148	867
Livingston	4,247	4,372	4,128	4,310	5,295
Luce	44	104	106	120	281
Mackinac	14,098	12,232	13,354	10,655	16,461
Macomb	3,206	2,378	2,547	4,615	6,030
Manistee	39,297	61,271	125,181	163,705	208,585
Marquette	213,496	288,303	369,226	303,429	514,317
Mason	58,968	57,896	68,837	76,944	93,921
Mecosta	972	850	772	903	866
Menominee	46	174	359	118	490
Midland	42,545	38,171	31,613	33,218	40,431
Missaukee	6,394	7,565	7,489	7,316	8,484
Monroe	28,925	23,537	33,132	35,185	43,963
Montcalm	1,082	1,140	1,244	1,808	1,317
Montmorency	152	5	641	83	78
Muskegon	3,388	2,735	3,811	3,824	5,816
Newaygo	375	559	205	247	147
Oakland	17,739	16,440	18,497	20,791	24,875
Oceana	615	1,541	1,286	3,105	2,665
Ogemaw	4,465	6,133	6,729	7,025	8,563
Ontonagon	111,470	96,448	58,202	61,327	51,105
Osceola	3,510	4,583	3,464	2,531	2,551
Oscoda	56	55	105	50	57
Otsego	38,393	68,342	78,706	82,613	93,321
Ottawa	6,431	5,269	5,633	5,159	6,314
Presque Isle	31,328	30,147	32,826	35,560	41,269
Roscommon	3,130	4,113	4,439	4,180	4,619
Saginaw	2,715	2,350	1,945	2,034	2,129
St. Clair	30,729	40,996	47,488	41,314	42,511
St. Joseph	571	[illegible]	490	847	737
Sanilac	1,996	2,931	1,744	3,158	2,106
Schoolcraft	1,113	1,775	1,423	1,774	2,272
Shiawassee	1,202	952	1,370	2,384	3,645
Tuscola	2,234	2,456	3,063	3,214	3,515
Van Buren	706	451	338	566	498
Washtenaw	2,248	2,832	2,792	3,347	3,049
Wayne	69,552	76,795	83,986	85,638	93,511
Wexford	1,016	3,176	6,542	10,510	13,721
Various	193	574			451
MICHIGAN	1,057,301	1,283,212	1,485,646	1,538,066	1,982,916

SOURCE: Michigan Department of Natural Resources, Michigan Mineral Producers, 1975 through 1978 (Lansing: annually), Table 3 (1977) and Geological Survey Division Files.

TABLE XIII-7. NUMBER OF ACTIVE MINES, SHIPMENTS, AND AVERAGE NUMBER OF MEN EMPLOYED IN IRON ORE MINING IN MICHIGAN: 1947-1980

Year	Number of active mines	Shipments by range (thousands of long tons) Marquette	Menominee	Gogebic	Employment
1947	36	5,543	3,668	3,710	6,227
1948	34	4,898	4,086	3,915	6,312
1949	36	4,253	3,587	3,156	6,151
1950	37	4,955	4,144	3,827	6,809
1951	37	5,647	4,708	3,319	6,908
1952	37	4,517	4,278	3,004	6,972
1953	40	5,572	4,621	3,188	6,534
1954	39	3,675	3,670	2,378	6,625
1955	37	6,640	5,326	3,183	6,093
1956	36	5,689	3,889	2,958	6,209
1957	36	5,993	4,297	2,837	6,311
1958	32	3,722	3,095	1,394	4,912
1959	27	3,530	2,478	1,251	4,163
1960	27	4,945	4,121	1,890	4,723
1961	24	4,183	3,886	1,362	3,466
1962	21	4,500	3,462	1,480	2,857
1963	19	5,850	4,304	813	3,586
1964	16	7,945	4,624	1,403	3,912
1965	16	8,925	4,361	773	3,775
1966	15	9,660	4,328	364	3,690
1967	12	10,165	3,630	239[a]	3,430
1968	11	9,367	3,449	0	3,090
1969	11	11,163	3,390	0	3,061
1970	7	10,336	2,925	0	2,798
1971	7	9,331	2,834	0	2,425
1972	6	9,251	2,577	0	2,226
1973	6	9,941	2,374	0	2,322
1974	6	9,009	2,522	0	2,548
1975	6	12,143	2,235	0	2,949
1976	6	13,362	2,326	0	3,032
1977	6	9,683	2,332	0	3,344
1978	6	15,934	2,252[b]	0	3,294
1979	5	14,993[c]	2,358	0	3,083
1980	4	13,868	1,866	0	2,822

SOURCE: Michigan Department of Natural Resources, Geological Survey Division, special release.

[a] Peterson mine permanently closed January 1967. Stockpile shipments completed in 1967.

[b] Sherwood mine closed July 1978, shipments continued through 1979.

[c] Mather mine closed July 1979, shipments continued through 1979.

TABLE XIII-8. PRODUCTION AND SHIPMENTS OF PORTLAND AND MASONRY CEMENT FROM MICHIGAN MILLS: 1947-1980

Year	Number of plants	Production (barrels)	Shipments (barrels)	Value of shipments
1947	7	10,211,809	10,470,766	$18,868,187
1948	7	11,410,085	11,117,000	23,533,000
1949	7	12,767,500	12,747,791	28,823,055
1950	7	12,967,102	12,854,423	29,619,766
1951	7	14,393,599	14,112,639	35,121,324
1952	7	14,790,587	14,760,783	35,819,041
1953	7	15,532,853	15,853,096	41,860,465
1954	7	16,671,383	16,711,710	45,691,867
1955	7	18,204,827	19,738,400	58,648,378
1956	8	10,327,814	21,880,222	67,798,262
1957	8	21,015,000	22,045,034	71,605,137
1958	8	19,841,000	20,911,990	70,432,501
1959	8	21,561,000	23,025,928	77,323,974
1960	9	20,971,000	22,351,498	77,694,087
1961	9	21,661,000	23,462,554	79,638,973
1962	9	23,070,000	24,198,903	77,601,954
1963	9	24,194,000	26,694,665	81,446,667
1964	9	26,802,000	28,133,856	89,270,172
1965	8	27,018,000	29,135,052	92,369,052
1966	8	28,848,000	29,683,903	92,634,187
1967	9	31,350,682	31,131,016	90,810,328
1968	9	32,779,308	32,868,574	104,084,405
1969	9	31,982,736	31,790,616	103,897,422
1970	9	31,982,091	32,318,659	110,513,273
1971	9	33,723,094	33,750,455	109,833,119
1972	9	32,717,784	32,719,919	117,368,094
1973	9	33,781,604	34,515,369	129,627,462
1974	8	n.a.	32,552,275	146,822,510
1975	8	n.a.	25,581,964	138,356,710
1976	8	28,358,195	27,388,260	153,751,000
1977	8	5,815,974[a]	5,796,698[a]	175,458,343
1978	7	6,210,009[a]	6,189,337[a]	225,402,230
1979	7	6,053,375	5,944,109	268,512,624
1980[p]	6	4,878,000	n.a.	243,000,000[e]

SOURCE: Michigan Department of Natural Resources, special release.

NOTE: one barrel = 376 pounds or 0.188 short tons.

a. Short tons.

p: Preliminary.

e: Estimated.

n.a.: not available.

TABLE XIII-9. COPPER PRODUCTION IN MICHIGAN, BY COUNTY: 1947-1980

(In pounds)

Year	Houghton	Keweenaw	Ontonagon	Total
1947	29,478,214	17,102,786	473,473	47,054,473
1948	30,742,279	23,567,382	124,381	54,434,042
1949	21,068,020	17,430,147	0	38,498,167
1950	24,275,530	27,499,933	12,554	51,788,017
1951	21,233,634	28,063,771	459	49,297,864
1952	19,395,760	23,657,231	886,313	43,939,304
1953	19,779,610	27,237,107	982,973	47,999,690
1954	19,902,724	23,805,586	1,078,493	44,786,803
1955	17,751,476	17,534,792	59,910,911	95,197,179
1956	21,399,846	25,267,891	76,612,498	123,280,235
1957	21,781,882	22,843,409	69,021,852	113,647,143
1958	16,345,030	23,886,930	81,827,063	122,059,023
1959	20,689,233	22,730,365	69,661,935	113,081,533
1960	21,704,276	18,592,215	75,142,046	115,438,537
1961	20,175,410	18,337,000	103,756,178	142,268,588
1962	24,072,160	13,075,067	106,613,451	143,760,678
1963	22,879,603	13,000,730	113,900,191	149,780,524
1964	19,818,237	9,507,806	108,458,751	137,784,794
1965	15,759,103	6,414,944	123,743,392	145,917,439
966	17,433,796	8,128,529	121,181,717	146,744,040
1967	16,695,626	7,763,357	92,731,257	117,190,240
1968	6,592,118	4,696,188	137,092,516	148,380,322
1969	0	0	149,952,283	149,952,283
1970	0	0	135,086,800	135,086,800
1971	0	0	112,155,147	112,155,147
1972	0	0	131,937,378	131,937,378
1973	0	0	151,678,939	151,678,939
1974	0	0	131,037,602	131,037,602
1975	1,455,657	0	140,819,850	142,275,507
1976	3,886,218	0	83,044,081	86,930,299
1977	0	0	85,960,551	85,960,551
1978	0	0	78,301,136	78,301,136
1979	0	0	87,469,886	87,469,886
1980	0	0	71,540,437	71,540,437

SOURCE: Michigan Department of Natural Resources, special release.

TABLE XIII-10. CONSTRUCTION AGGREGATE AND INDUSTRIAL SAND SOLD OR USED IN MICHIGAN, BY MAJOR USE CATEGORY: 1979

(In thousands of short tons and thousands of dollars)

Category	Quantity	Value[a]
Construction aggregate		
Concrete aggregate (residential, nonresidential, highways, bridges, dams, waterworks, airports, and so forth)	14,019	$ 32,464
Concrete products (cement blocks, bricks, pipe, and so forth)	1,885	4,210
Asphaltic concrete aggregates and other bituminous mixtures	6,572	11,964
Road bases and coverings	15,380	28,366
Fill	4,993	6,048
Other uses	1,748	3,584
TOTAL[b]	44,597	86,636

SOURCE: U.S. Bureau of Mines Minerals Yearbook, 1978-79.
NOTE: Includes processed and unprocessed sand and gravel.
a. Values f.o.b. plant of blended processed sand and gravel used as construction aggregate. Unit value of construction aggregate is generally higher than the unit value of unblended processed sand or gravel.
b. Totals may not add due to rounding.

TABLE XIII-11. INDUSTRIAL SAND AND GRAVEL SOLD OR USED IN MICHIGAN, BY PRODUCER AND USE: 1979

(In thousands of short tons and thousands of dollars)

Use	Quantity	Value
Molding	4,654	$ 22,081
Engine	6	81
Blast	9	94
Other[a]	903	7,706
TOTAL[b]	5,572	$ 29,962

SOURCE: U.S. Bureau of Mines tabulations.
a. Includes sand and gravel used for grinding and polishing, foundry, filtration, glass, and other uses.
b. Totals may not add due to rounding.

TABLE XIII-12. STONE SOLD OR USED BY MICHIGAN PRODUCERS, BY KIND AND BY USE: 1978 AND 1979

	1978		1979	
Kind and use	Quantity (1,000) short tons	Value ($1,000)	Quantity (1,000) short tons	Value ($1,000)
Kind				
Dimension[a]	8	155	9	166
Crushed and broken				
Limestone and dolomite	40,100	90,937	39,721	99,571
Marl	26	59	23	50
Sandstone	(D)	(D)	(D)	(D)
Traprock	(D)	(D)	(D)	(D)
Other[b]	550	3,428	586	6,419
TOTAL[c]	40,684	94,615	40,339	106,206
Use[d]				
Lime manufacture[e]	9,389	21,543	9,810	25,027
Flux stone	10,660	27,499	7,468	21,489
Cement manufacture	6,997	12,851	7,234	15,159
Concrete aggregate	4,732	9,336	4,761	9,882
Roadstone & other unspecified aggregate	2,113	5,386	4,089	11,159
Bituminous aggregate	1,897	4,799	2,151	5,972
Dense graded roadbase stone	946	2,205	1,277	3,526
Macadam aggregate	(D)	(D)	603	1,307
Agricultural limestone	512	1,164	366	956
Riprap and jetty stone	174	363	588	1,607
Railroad ballast	311	745	437	1,075
Surface treatment aggregate	120	311	138	428
Soil conditioner	26	59	23	50
Other uses[f]	2,802	8,203	1,384	8,402
TOTAL[c]	40,676	94,460	40,329	106,039

SOURCE: U.S. Bureau of Mines, special release.

a. Includes limestone, dolomite, and sandstone.
b. Includes sandstone, traprock and granite withheld.
c. Data may not add to totals shown because of independent rounding.
d. Crushed or broken stone only.
e. Includes stone used in chemical stone for alkali work, sugar refining, and dead-burned dolomite (1977).
f. Includes stone used for refractory stone, glass manufacturing, mineral food, paper manufacturing, filter stone, terrazzo and exposed aggregate, manufactured fine aggregate, deadburned dolomite, chemical stone, sugar manufacturing, and uses indicated by symbol (D).
(D): Withheld to avoid disclosing data for individual companies. Included with other uses.
(D): Withheld to avoid disclosing individual company confidential data. Included with other uses.

TABLE XIII-13. PERMITS TO DRILL, AND OIL AND GAS WELL COMPLETIONS IN MICHIGAN: 1950-1980

		Classification of well completions					
				Service wells			
Year	Permits issued	Oil wells	Gas wells	OBS-GS[a]	BDW-LPG[b]	Dry holes	Total completions
1950	901	336	28	47	0	473	884
1951	744	227	20	43	1	466	757
1952	694	261	30	51	2	370	714
1953	824	258	18	110	1	360	747
1954	573	214	15	2	2	338	571
1955	484	204	13	1	1	291	510
1956	476	196	12	28	0	227	463
1957	461	176	40	35	3	207	461
1958	481	166	20	36	4	227	453
1959	727	257	47	72	4	272	652
1960	904	372	19	79	1	441	912
1961	849	207	57	74	3	376	817
1962	711	148	62	53	4	474	741
1963	704	135	72	56	2	384	650
1964	583	82	48	126[c]	0	376	632
1965	494	53	34	106	0	291	485
1966	430	56	45	11	2	290	404
1967	405	69	38	26	0	287	420
1968	378	70	12	30[d]	6	251	369
1969	379	73	9	26	0	239	347
1970	425	50	16	108	3	211	388
1971	425	83	31	83	13	186	396
1972	423	84	38	64	2	186	374
1973	445	81	47	67	0	173	369
1974	503	134	61	54	2	235	484
1975	653	167	40	38	0	330	571
1976	645	120	57	50	0	333	560
1977	692	136	70	49	1	341	597
1978	690	146	57	74	0	325	602
1979	649	173	58	68	0	290	589
1980	856	208	51	57	0	416	732

SOURCE: Michigan Department of Natural Resources, Michigan's Oil and Gas Fields, 1947 through 1980, (Lansing: annually), pp. 4, 14 (1980).

a. OBS-GS: wells used for gas storage or observation.

b. LPG injection and extraction wells in liquified petroleum gas storage facilities and brine disposal wells.

c. Includes three brine disposal wells, one water injection well, and one geological information test.

d. Includes two water injection wells and one brine disposal well.

TABLE XIII-14. OIL AND GAS WELL COMPLETIONS IN MICHIGAN, AND FOOTAGE DRILLED, BY COUNTY: 1979 AND 1980

County	1979				1980			
	Total well footage				Total well footage			
	Exploratory	Developmental	Average[a] well depth	Total wells drilled	Exploratory	Developmental	Average well depth	Total wells drilled
Alcona	3,257	0	3,257	1	--	--	--	--
Allegan	7,015	10,374	3,515	5	5,570	0	2,785	2
Antrim	1,853	13,706	5,186	3	6,815	8,743	5,186	3
Arenac	8,596	0	4,322	2	4,344	9,036	4,460	3
Bay	6,564	0	3,282	2	25,181	12,752	3,448	11
Berrien	0	0	0	0	637	0	637	1
Branch	4,633	0	4,633	1	--	--	--	--
Calhoun	36,717	39,432	2,929	26	80,905	58,258	3,236	43
Cass	1,240	1,516	919	3	2,472	6,745	805	12
Cheboygan	23,041	0	3,840	6	13,388	5,719	3,821	5
Clare	14,849	61,741	4,884	16	20,353	46,692	4,282	19
Clinton	5,620	0	2,810	2	--	--	--	--
Crawford	14,746	30,954	5,078	9	7,102	44,708	6,001	12
Eaton	45,007	11,693	4,050	14	51,609	15,451	3,945	17
Genesee	0	3,202	3,202	1	0	0	0	0
Gladwin	6,435	20,039	3,414	9	0	69,688	2,904	24
Grand Traverse	265,971	116,486	5,884	65	285,715	243,210	5,206	102
Gratiot	2,640	0	2,640	1	0	0	0	0
Hillsdale	0	20,441	4,088	5	12,648	28,477	4,113	10
Ingham	22,234	3,735	3,701	7	74,661	24,368	3,961	25
Isabella	14,391	0	3,607	5	8,890	31,439	4,033	10
Jackson	16,843	16,914	4,822	7	0	39,701	5,672	7
Kalamazoo	5,830	0	2,915	2	0	2,830	2,830	1
Kalkaska	148,001	98,154	6,154	40	129,862	134,211	6,230	59
Lapeer	3,220	25,827	3,227	9	9,878	34,926	3,200	14

TABLE XIII-14. OIL AND GAS WELL COMPLETIONS IN MICHIGAN, AND FOOTAGE DRILLED, BY COUNTY: 1979 AND 1980 (cont.)

County	1979				1980			
	Total well footage				Total well footage			
	Exploratory	Developmental	Average[a] well depth	Total wells drilled	Exploratory	Developmental	Average well depth	Total wells drilled
Lenawee	0	0	0	1	4,921	3,790	2,178	4
Livingston	17,721	3,980	4,340	5	19,993	0	3,332	6
Macomb	19,759	7,286	2,736	10	20,257	16,610	3,687	10
Manistee	116,170	262,800	4,467	86	164,926	165,768	4,492	74
Mason	3,000	4,540	2,513	3	0	6,972	3,486	2
Mecosta	3,666	2,932	1,581	17	16,068	1,342	2,352	11
Midland	0	0	3,800	1	3,707	10,698	3,601	4
Missaukee	22,345	101,032	4,406	28	916	120,070	4,551	29
Monroe	0	0	0	0	3,101	0	3,101	1
Montcalm	0	0	1,300	8	3,275	3,315	1,657	12
Montmorency	37,058	6,636	4,369	10	33,451	0	4,779	7
Muskegon	0	2,026	2,026	1	1,743	0	1,743	1
Newaygo	0	0	1,182	3	3,100	13,799	3,380	5
Oakland	12,300	14,211	3,787	7	30,124	25,495	3,973	14
Oceana	5,065	1,640	3,353	2	16,042	4,299	5,085	4
Ogemaw	0	19,285	2,750	13	4,139	33,616	3,195	17
Osceola	8,243	0	4,122	2	14,770	0	4,923	3
Otsego	90,664	146,356	4,799	55	124,277	118,886	4,445	61
Ottawa	0	0	0	0	2,835	0	2,835	1
Presque Isle	92,251	13,166	3,401	31	105,305	0	3,097	34

TABLE XIII-14. OIL AND GAS WELL COMPLETIONS IN MICHIGAN, AND FOOTAGE DRILLED, BY COUNTY: 1979 AND 1980 (cont.)

	1979				1980			
	Total well footage				Total well footage			
County	Exploratory	Developmental	Average[a] well depth	Total wells drilled	Exploratory	Developmental	Average well depth	Total wells drilled
Roscommon	0	27,791	4,632	6	3,737	71,412	4,421	17
Saginaw	5,457	2,449	2,635	3	6,038	12,848	2,698	7
Sanilac	2,619	0	2,619	1	8,512	0	8,512	1
St. Clair	11,988	7,108	4,320	29	10,785	3,135	2,784	5
Tuscola	4,025	41,263	4,529	10	11,194	15,314	4,418	6
Van Buren	3,461	5,813	1,159	8	3,625	5,921	1,335	8
Washtenaw	8,475	0	4,238	2	0	3,681	3,681	1
Wayne	0	0	0	0	0	0	1,164	2
Wexford	23,545	6,182	4,955	6	8,126	14,143	1,164	5
TOTAL	1,146,515	1,150,710		589	1,375,993	1,468,038		732

SOURCE: Michigan Department of Natural Resources, Michigan's Oil and Gas Fields, 1979 and 1980 (Lansing: annually), Table 1 (1980).

a. In some cases average well depth includes facility footage credited to old wells drilled deeper as well as exploratory footage and/or developmental footage.

b. Includes some exploratory footage credited to old wells drilled deeper.

c. Includes some development footage credited to old wells drilled deeper.

TABLE XIII-15. STATE OF MICHIGAN REVENUE FROM OIL AND NATURAL GAS PRODUCTION: 1927-1979

Years	Royalty	Rental	Bonus	Application, assignment fees	Total income
1927-1931	$ 85,263	$ 43,822	$ 27,707	$ 1,204	$ 157,996
1932-1936	209,126	205,350	87,211	4,506	506,193
1937-1941	1,302,356	724,330	515,706	7,367	2,549,759
1942-1946	1,645,462	2,021,513	601,065	3,759	4,271,800
1947-1951	1,813,632	2,256,914	1,307,470	4,398	5,382,414
1952-1956	2,727,410	1,989,343	257,187	3,028	4,976,968
1957-1961	1,879,927	769,594	475,841	3,702	3,129,064
1962-1966	1,259,162	1,476,950	409,809	4,982	3,150,903
1967	250,785	199,399	49,192	1,126	500,501
1968	324,934	451,117	1,223,971	2,849	2,002,870
1969	404,709	819,550	894,133	872	2,119,264
1970	429,796	929,596	-132	736	1,359,996
1971	749,815	858,360	1,361	426	1,609,962
1972	944,441	831,057	10,165,151	2,854	11,943,502
1973	1,960,854	1,261,208	3,133	1,658	3,226,852
1974	5,814,636	1,280,109	7,131,732	2,248	14,228,725
1975	9,637,835	1,297,691	514,248	2,603	11,452,378
1976	13,293,209	1,328,660	524,973	616	15,147,458
1977	13,327,908	1,190,620	357,006	3,069	14,878,603
1978	18,244,756	1,131,238	14,483	1,733	19,392,210
1979	24,269,564	1,100,307	1,414,667	1,047	26,785,585

SOURCE: Michigan Department of Natural Resources, *Michigan's Oil and Gas Fields, 1979* (Lansing: 1980), p. 64.

TABLE XIII-16. NATURAL GAS PLANT OPERATIONS IN MICHIGAN, BY PLANT OR FIELD: 1980

Plant or field	Total input (Mcf.)	Sales to pipe line (Mcf.)	Liquefied petroleum gas recovery (gallons)
Albion-Scipio	5,653,251	3,967,758	19,556,685
Aurelius	6,525,054	5,611,879	12,959,158
Beaver Creek	528,783	304,656	132,000
Chester	480,180	384,573	921,621
Columbus, Section 3	914,198	0	2,142,546
Convis	176,461	121,857	201,597
Hamilton[a]	110,364	47,439	0
Kalkaska (Amoco)	44,276,867	40,121,308	92,738,259
Kalkaska (Shell)	86,949,682	71,113,251	351,532,230
Leonard	2,381,946	1,286,191	2,060,625
Reed City	9,392,032	0	2,755,068
Romeo	1,289,788	1,258,839	997,646
TOTALS	189,443,057	141,780,756	486,112,861

SOURCE: Michigan Department of Natural Resources, Michigan's Oil and Gas Fields, 1980 (Lansing: 1981), Table 6.

NOTE: This table is the record of plants which are serving oil field operations, or which are extracting natural gas liquids from designated dry gas sources.

a. Receives and processes oil well gas only.

b. These LPG figures include stabilized condensate.

There have been three censuses of construction industries since 1939, one for 1967 and others for 1972 and 1977. Current law authorizes the U.S. Bureau of the Census to canvass the nation's industrial and business establishments at five-year intervals (for years ending in 2 and 7). These economic censuses cover construction industries, manufacturing, mining, retail trade, selected services, selected transportation, and wholesale trade.

Each establishment is classified on the basis of its major economic activity: those primarily engaged in contract construction (general contractors or special trade contractors such as plumbing and electrical work), in construction for sales on their own account (operative builders), or in subdividing real property into lots (subdividers and developers, except cemeteries).

A construction establishment is a place of business from which such activities as estimating, bidding, scheduling, purchasing, supervision, and so forth, are conducted irrespective of the locations of construction sites that are not separate establishments in and of themselves. A construction concern engaging in two or more distinctly different lines of economic activity, such as wholesaling or retailing, reports on each separately, provided that each activity is of substantial size and that separate records are available or can be estimated for the activity.

Construction firms are divided into those with payroll and those without. The former were queried in a census survey as to whether they were large, medium, or small. Nonemployers were not required to complete a Census of Construction Industries questionnaire; instead, the Census Bureau obtained relevant information from administrative records of other agencies.

Current data on construction activity are available in two Census Bureau publications. Construction Reports and Construction Review. Demolition statistics have been published in Construction Reports since 1969. The F. W. Dodge Company also reports on construction activity.

Union scales for construction crafts are reported annually in a bulletin published by the U.S. Bureau of Labor Statistics.

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TABLE XIV-1. AVERAGE WAGE AND SALARY EMPLOYMENT AND WEEKLY HOURS AND EARNINGS OF PRODUCTION WORKERS IN MICHIGAN AND UNITED STATES ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS CONTRACT CONSTRUCTION, SUBDIVIDING, OR DEVELOPING: 1956-1980

	Michigan				United States			
	Employment	Weekly		Hourly	Employment	Weekly		Hourly
Year	(000)	Hours	Earnings	earnings	(000)	Hours	Earnings	earnings
1956	101.1	38.5	114.48	2.98	3039	37.5	96.38	2.57
1957	96.0	37.0	116.85	3.16	2962	37.0	100.27	2.71
1958	85.9	36.9	123.00	3.33	2,817	36.8	103.78	2.82
1959	77.4	37.9	131.06	3.46	3,004	37.0	108.41	2.93
1960	97.2	37.5	131.03	3.49	2,926	36.7	112.67	3.07
1961	91.2	37.8	132.98	3.52	2,859	36.9	118.08	3.20
1962	88.0	34.9	134.37	3.85	2,948	37.0	122.47	3.31
1963	94.0	35.5	141.89	4.00	3,010	37.3	127.19	3.41
1964	99.5	35.3	145.79	4.13	3,097	37.2	132.06	3.55
1965	111.1	39.7	178.09	4.49	3,232	37.4	138.38	3.70
1966	115.2	39.4	188.77	4.79	3,317	37.6	146.26	3.89
1967	120.0	40.9	202.46	4.95	3,248	37.7	154.95	4.11
1968	107.7	39.2	211.33	5.39	3,350	37.3	164.49	4.41
1969	128.6	38.9	246.70	6.34	3,575	37.9	181.54	4.79
1970	118.5	37.2	257.09	6.91	3,588	37.3	195.45	5.24
1971	120.5	36.3	275.92	7.60	3,704	37.2	211.67	5.69
1972	127.5	36.5	290.37	7.96	3,889	36.5	221.19	6.06
1973	131.4	36.8	306.62	8.33	4,097	36.8	235.89	6.41
1974	125.8	36.5	319.99	8.76	4,020	36.6	249.25	6.81
1975	106.3	36.4	342.20	9.40	3,525	36.4	266.08	7.31
1976	110.0	36.9	362.90	9.84	3,576	36.8	283.73	7.71
1977	122.8	36.8	386.22	10.50	3,851	36.5	295.65	8.10
1978	138.8	38.4	424.74	11.06	4,229	36.8	318.69	8.66
1979	139.5	37.9	448.24	11.83	4,463	37.0	342.99	9.27
1980	117.1	36.4	459.37	12.62	4,399	37.0	367.04	9.92

SOURCE: Michigan Employment Security Commission, special release; and Bureau of Lavor Statistics, Employment and Earnings (Washington, D.C. monthly), October 1981, Tables B-1 and C-1.

TABLE XIV-2. COMPARATIVE MICHIGAN-U.S. CONSTRUCTION INDUSTRY STATISTICS: 1972-1977.

Industry	Michigan value added as a percentage of U.S. value-added 1972	Ranked 1977	Percentage increase in value-added Michigan	U.S.	Value-added per establishment ($000) 1977 Michigan	U.S.	Payroll per employee($) 1977 Michigan	U.S.	Payroll as a percentage of value-added, 1977 Michigan	U.S.
Wrecking & demolition	.07	.056	-.12	.08	218.04	215.34	9.43	10.73	.37	.42
Installing building equip. n.e.c.	.07	.050	.03	.42	752.16	567.20	22.33	18.60	.56	.54
Roofing & sheet metal	.07	.048	.50	.40	217.00	166.20	13.70	11.45	.60	.60
Excavating & foundation	.05	.047	.28	.37	176.35	181.20	12.61	11.60	.40	.40
Carpentering	.06	.046	.15	.40	127.42	85.41	13.44	8.64	.63	.58
Industrial bldgs. & warehouses	.04	.043	.55	.55	481.00	515.50	16.72	14.12	.68	.67
Concrete	.05	.042	-.11	.04	111.82	131.25	12.00	10.24	.53	.54
Glass & glazing	.05	.041	.60	.67	177.60	173.85	13.40	12.13	.56	.55
Plumbing, heating, air condi.	.04	.041	.41	.40	233.50	189.30	17.14	14.00	.62	.60
Terrazzo, tile, marble, & mosaic	.01	.040	6.00	.06	164.61	114.00	16.00	11.44	.54	.60
Structural steel erection	.04	.040	.23	.17	642.60	457.00	16.30	14.30	.56	.57
Masonry, stonesetting, & other stonework	.05	.039	-.03	.17	97.40	97.40	12.50	9.80	.58	.62
Highway & street construc.	.04	.038	.30	.31	780.60	650.43	17.50	13.42	.50	.47
Water well drilling	.05	.037	.50	.93	101.80	146.06	10.05	10.60	.37	.40
Water, sewer, & util. lines	.50	.036	.05	.43	560.00	540.00	17.75	14.30	.50	.51
Electrical	.04	.035	5.02	.51	221.70	238.00	17.00	15.40	.65	.63
Special trade contractors n.e.c.	.00	.034	.00	.74	143.70	130.55	11.70	10.80	.51	.51
Painting, paperhanging, & decorating	.03	.033	4.42	.30	100.55	141.06	12.10	10.23	.55	.60
Plastering, drywall, & insulation	.04	.033	.32	.40	195.20	217.00	15.00	12.54	.64	.62
Floor laying & other floorwork	.04	.032	.10	.30	130.10	92.00	13.34	11.05	.60	.55
Bridge, tunnel, & hwy. construc.	.02	.031	.53	-.01	1,246.00	983.30	19.26	14.07	.51	.56
Single-family houses	W	.030	W	W	67.30	72.30	9.40	8.52	.53	.51
Nonresidential building, n.e.c.	.03	.027	-.13	.09	300.00	385.13	15.89	13.72	.64	.60
Other residential bldgs.	.25	.025	-.26	-.27	224.31	239.70	13.25	11.62	.84	.57
Heavy construction, n.e.c.	.03	.025	1.17	1.25	1,183.08	1,492.05	19.70	17.70	.55	.60
Operative builders	W	.014	W	W	151.20	222.73	12.60	11.66	.44	.40

SOURCE: Developed from Bureau of the Census, Census of Construction Industries, 1977, Geographic Area Series, East North Central States (Washington, D.C.: 1980), CC77-A-3, Table 3; and a similar document for the United States.

TABLE XIV-3. SUMMARY STATISTICS FOR MICHIGAN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS CONTRACT CONSTRUCTION, SUBDIVIDING, AND DEVELOPING: 1967, 1972, AND 1977

Item	1967	1972	1977
Proprietors and working partners			
Total	25,635	28,778	34,221
In establishments with payroll	11,086	10,423	9,199
Total receipts, establishments without payroll ($000)	219,527	344,525	651,641
Establishments with payroll			
Number:			
With 1 - 9 employees	11,538	13,537	13,623
With 10 - 49 employees	2,238	2,489	2,419
With 50 - 99 employees	284	253	206
With 100 employees or more	145	125	105
Total	14,205	16,404	16,354
Number of employees:			
Mid-March	104,985	107,609	102,460
Mid-May	124,637	130,655	133,427
Mid-August	140,582	146,165	143,109
Mid-November	127,769	131,886	133,332
Average	125,853	130,828	128,198
Payroll, entire year ($000)	1,061,479	1,527,560	1,923,025
Construction workers:			
Mid-March	88,229	84,603	83,053
Mid-May	107,621	106,659	112,002
Mid-August	122,945	121,437	122,138
Mid-November	110,396	107,387	112,054
Average	108,637	106,685	107,420
Payroll, entire year ($000)	875,026	1,220,662	1,537,235
Total selected payments ($000)	2,338,513	3,231,495	4,326,389
Materials, components, and supplies ($000)	1,179,026	1,654,576	2,248,550
Construction work subcontracted to others ($000)	1,160,336	1,576,919	1,941,319
Total receipts ($000)	4,232,336	5,961,230	7,759,714
Total construction receipts ($000)	4,127,817	5,746,253	7,549,535
Receipts for work subcontracted in from others ($000)	865,871	1,278,948	1,852,362
Other business receipts and land receipts ($000)	103,094	214,977	210,179
Net construction receipts ($000)	2,967,588	4,169,334	5,608,217
Value added in construction ($000)	1,850,119	2,615,296	3,378,784

SOURCE: Bureau of the Census, U.S. Census of Construction Industries, 1977, Area Series, East North Central States (Washington, D.C.: 1980), CC77-A-3, Tables 3 and 4; and similar documents for previous years.

TABLE XIV-4. SUMMARY STATISTICS FOR UNITED STATES ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS CONTRACT CONSTRUCTION, SUBDIVIDING, AND DEVELOPING: 1967, 1972 AND 1977

ITEM	1967	1972	1977
Number of establishments with payroll:			
With 1 - 9 employees	368,771	437,941	480,014
With 10 - 49 employees	301,587	351,494	391,345
With 50 - 99 employees	56,920	73,937	77,692
With 100 employees or more	6,419	7,991	7,041
Total	3,845	4,519	3,936
Proprietors and working partners;			
Total	696,813	748,253	1,013,961
In establishments with payroll	270,511	274,434	279,309
Total receipts, establishments without payroll ($000)	5,809,943	8,608,039	20,150,970
Establishments with payroll			
Number of employees;			
Mid-March	3,038,721	3,668,194	3,782,235
Mid-May	3,393,104	4,077,149	4,371,767
Mid-August	3,740,136	4,475,893	4,585,861
Mid-November	3,437,012	4,179,628	4,336,522
Average	3,436,265	4,145,779	4,272,659
Payroll, entire year ($000)	24,213,187	40,004,782	54,980,063
Construction workers:			
Mid-March	2,572,985	3,034,864	3,104,164
Mid-May	2,923,346	3,424,013	3,648,751
Mid-August	3,244,628	3,800,426	3,872,029
Mid-November	2,960,362	3,509,774	3,623,655
Average	2,960,308	3,486,592	3,565,469
Payroll, entire year ($000)	19,855,476	32,187,130	43,112,339
Total selected payments ($000)	52,451,424	84,623,758	112,110,369
Materials, components, & supplies ($000)	29,378,373	46,426,441	67,983,316
Construction work subcontracted to others ($000)	23,069,834	38,199,317	50,328,020
Total receipts ($000)	95,925,449	155,849,652	224,664,938
Total construction receipts ($000)	92,588,002	149,429,496	214,844,319
Receipts for work subcontracted in from others ($000)	17,959,822	30,857,137	49,806,349
Other business receipts and land receipts ($000)	3,341,090	6,420,156	9,820,620
Net construction receipts ($000)	69,520,058	111,232,179	164,516,299
Value added in construction ($000)	42,322,697	68,197,327	98,863,653

SOURCE; Bureau of the Census, U.S. Census of Construction Industries, 1977, U.S. Summary (Washington, D.C.: 1980), CC77-A-10, Tables 1 and 4; and similar documents for previous years.

TABLE XIV-5. RANKING OF STATES ACCORDING TO PERCENTAGE CHANGE IN VALUE ADDED BY ESTABLISHMENTS CLASSIFIED IN THE CONSTRUCTION INDUSTRY: 1972-1977.

State	Percentage change	State	Percentage change	State	Percentage change
Alaska	2.931	Idaho	.660	Tennessee	.303
Wyoming	1.420	Nevada	.654	Michigan	.300
Texas	1.300	Wisconsin	.596	Maine	.274
North Dakota	1.143	Oklahoma	.593	Pennsylvania	.260
Montana	1.080	Colorado	.583	Delaware	.240
Washington	1.003	South Carolina	.560	North Carolina	.230
Louisiana	.903	Minnesota	.520	New Hampshire	.216
Kansas	.851	Missouri	.513	Georgia	.180
New Mexico	.840	Virginia	.473	Vermont	.179
Iowa	.810	Indiana	.460	Arizona	.178
Nebraska	.806	Kentucky	.434	Dist. of Columbia	.170
Utah	.793	Maryland	.424	New Jersey	.094
Alabama	.784	Ohio	.412	Florida	.047
California	.770	Illinois	.410	Connecticut	.046
South Dakota	.751	Arkansas	.372	Rhode Island	.036
Oregon	.723	Hawaii	.332	Massachusetts	-.094
West Virginia	.712	Mississippi	.326	New York	-.100

SOURCE: Developed from Bureau of the Census, U.S. Census of Construction Industries, 1977 U.S. Summary (Washington, D.C.: 1980), CC77-A-10, Table 4.

TABLE XIV-6. RANKING OF STATES ACCORDING TO VALUE ADDED PER ESTABLISHMENT CLASSIFIED IN THE CONSTRUCTION INDUSTRY: 1977 IN ($000)

State	Value added per establishment	State	Value added per establishment	State	Value added per establishment
Alaska	575.31	Washington	203.00	Virginia	162.10
Dist. of Columbia	519.00	South Carolina	198.00	North Dakota	161.03
Hawaii	367.31	Missouri	196.00	Georgia	161.01
Nevada	319.00	Indiana	192.00	Connecticut	160.00
Louisiana	305.23	New York	189.00	Oklahoma	157.50
Texas	304.00	Nebraska	183.30	Tennessee	157.00
California	287.00	Wyoming	179.01	Kentucky	148.00
Illinois	268.00	Idaho	174.11	Montana	145.40
Delaware	254.20	Wisconsin	174.00	Iowa	145.00
Arizona	245.00	Kansas	173.12	Mississippi	132.00
Maryland	240.00	Utah	172.00	Rhode Island	131.14
Colorado	218.50	West Virginia	170.00	North Carolina	128.00
Ohio	212.00	New Jersey	168.00	South Dakota	116.00
Pennsylvania	210.05	Massachusetts	165.44	Arkansas	113.10
Minnesota	210.00	New Mexico	165.00	New Hampshire	110.11
Michigan	207.00	Oregon	164.00	Maine	104.11
Alabama	205.00	Florida	163.40	Vermont	85.00

SOURCE: Developed from Bureau of the Census, U.S. Census of Construction Industries, 1977 U.S. Summary (Washington, D.C.: 1980), CC77-A-10, Table 4.

TABLE XIV-8. DETAILED STATISTICS FOR MICHIGAN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS CONTRACT CONSTRUCTION, SUBDIVIDING, AND DEVELOPING: 1972 AND 1977

Industry group or industry		Number of establish-ments	Employment[a] Construction workers	Employment[a] Total	Yearly payroll[b] Construction workers	Yearly payroll[b] Total	Receipts during year[c]	Value added in construction[d]
Construction industries:								
Gen'l. bldg. contractors & operative builders:								
Gen'l. contractors, residential buildings:								
Single-family houses	1972	3,394	9,920	14,389	74,798	120,584	993,825	209,089
	1977	3,266	10,960	12,499	96,135	117,528	677,833+	219,913
Other residential bldgs.	1972	253	1,630	2,145	16,980	22,807	170,345	38,295
	1977	127	1,529	1,805	19,130	23,922	176,199	28,487
Operative builders								
Gen'l. contractors, non-residential bldgs.:								
Ind'l. bldgs. & whs.	1972	399	4,888	6,182	60,549	78,798	441,170	116,681
	1977	377	5,895	7,322	93,780	122,395	750,780	181,340
Nonresidential bldgs.,N.E.C.	1972	860	7,480	9,885	86,226	121,264	851,968	217,533
	1977	632	5,886	7,576	83,562	120,437	787,473	169,491
Heavy construction gen'l. contractors:								
Highway & street construction	1972	279	6,634	7,739	97,963	114,898	431,015	226,388
	1977	375	7,184	8,303	121,681	144,986	599,373	292,715
Heavy construction, except highway:								
Bridge, tunnel, & elevated highway construction	1972	27	632	731	9,601	11,694	40,377	19,493
	1977	24	710	797	12,655	15,347	66,326	29,902
Water, sewer, & utility lines	1972	310	6,358	7,267	84,354	100,880	335,950	190,092
	1977	358	4,805	5,581	81,072	99,075	362,317	200,400
Heavy construction, N.E.C.	1972	203	4,423	5,182	67,839	79,873	218,497	141,513
	1977	259	7,263	8,562	130,544	168,578	636,579	306,317

TABLE XIV-7. GENERAL STATISTICS FOR MICHIGAN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS CONTRACT CONSTRUCTION, SUBDIVIDING, AND DEVELOPING: 1972 AND 1977

Industry or industry group	Number of establishments		Number of proprietors and working partners		All employees[a]		Total receipts ($000,000)	
	1972	1977	1972	1977	1972	1977	1972	1977
			All establishments					
Gen'l. bldg. contractors & operative builders	8,175	9,674	6,003	7,448	32,601	31,768	$ 2,593	$ 3,100
Heavy construction gen'l. contractors	1,582	1,947	1,102	1,322	20,919	23,243	1,044	1,744
Special trade contractors	24,844	28,691	21,438	24,842	76,106	72,410	2,558	3,477
Plumbing, heating, & air conditioning	3,257	3,501	2,387	2,417	15,658	15,684	668	919
Electrical work	2,561	2,870	1,816	2,238	12,207	12,020	412	531
Subdividers & developers, N.E.C.	427	484	161	609	1,202	776	109	90
TOTAL	35,102	40,791	28,778	34,221	130,828	128,198	6,306	8,411
			Establishments with payroll					
Gen'l. bldg. contractors & operative builders	4,906	4,891	2,874	2,679	32,601	31,768	$ 2,457	$ 2,828
Heavy construction gen'l. contractors	819	1,016	347	393	20,919	23,243	1,026	1,715
Special trade contractors	10,524	10,364	7,171	6,095	76,106	72,410	2,389	3,176
Plumbing, heating, & air conditioning	1,960	1,868	1,106	753	15,658	15,684	645	875
Electrical work	1,467	1,458	802	820	12,207	12,020	399	507
Subdividers & developers, N.E.C.	155	88	31	32	1,202	776	89	41
TOTAL	16,404	16,354	10,423	9,199	130,828	128,198	5,961	7,760

SOURCE: Bureau of the Census, U.S. Census of Construction Industries, 1977, Area Series, East North Central States (Washington, D.C.: 1980), CC77-A-3, Table 1; and the similar document for 1972.

a. Average for the four payroll periods ending nearest the 15th of March, May, August, and November.

N.E.C.: not elsewhere classified.

TABLE XIV-8. DETAILED STATISTICS FOR MICHIGAN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS CONTRACT CONSTRUCTION, SUBDIVIDING, AND DEVELOPING: 1972 AND 1977 (cont.)

Industry group or industry		Number of establish-ments	Employment[a]		Yearly payroll[b]		Receipts during year	Value added in construction[d]
			Construction workers	Total	Construction workers	Total		
Special trade contractors:								
Plumbing, heating, & air conditioning	1972	1,960	12,406	15,658	160,121	200,489	645,496	310,252
	1977	1,868	12,695	15,684	215,732	268,799	864,266	436,163
Painting, paper hanging, & decorating	1972	825	3,545	3,828	32,918	36,301	74,090	59,764
	1977	784	3,155	3,602	37,636	43,564	100,669	78,835
Electrical work	1972	1,467	10,006	12,207	133,489	161,432	398,912	253,207
	1977	1,458	10,086	12,020	168,616	201,896	496,947	310,091
Masonry, plastering, & tile setting:								
Masonry, stone setting, & other stonework	1972	1,021	5,620	6,098	51,853	58,541	149,627	97,935
	1977	975	4,051	4,368	48,522	54,608	146,796	94,962
Plastering, drywall, & insulation work	1972	491	4,583	5,152	53,060	60,818	149,528	91,415
	1977	616	4,601	5,251	65,194	77,395	196,766	120,220
Terrazzo, tile, marble & mosaic work	1972	131	542	676	6,359	7,680	21,476	13,867
	1977	109	517	618	7,902	9,653	30,754	17,942
Carpentering & flooring:								
Carpentering	1972	773	5,172	5,667	52,436	57,847	115,074	83,974
	1977	756	4,083	4,532	53,662	60,912	139,379	96,335
Floor laying & other floorwork	1972	301	996	1,237	10,092	12,965	38,318	24,216
NAMES AND ADDRESSES:								
Roofing & sheet metal work	1972	753	5,453	6,403	53,246	66,640	178,487	110,249
	1977	760	5,936	7,087	76,504	97,056	300,655	164,638
Concrete work	1972	905	5,153	5,743	48,105	55,700	177,865	104,556
	1977	828	3,699	4,160	41,918	49,374	169,570	92,589
Water well drilling	1972	203	587	665	4,572	5,381	24,996	15,572
	1977	227	738	858	7,310	8,623	43,149	23,107
Misc. special trade contractors:								
Structural steel erection	1972	121	1,631	1,807	20,195	22,949	51,525	38,412
	1977	73	1,371	1,616	19,979	26,304	74,362	46,908
Glass & glazing work	1972	101	521	789	5,841	8,710	27,347	14,883
	1977	133	741	989	9,828	13,238	39,821	23,620

TABLE XIV-8. DETAILED STATISTICS FOR MICHIGAN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS CONTRACT CONSTRUCTION, SUBDIVIDING, AND DEVELOPING: 1972 AND 1977 (cont.)

Industry group or industry		Number of establishments	Employment[a] Construction workers	Employment[a] Total	Yearly payroll[b] Construction workers	Yearly payroll[b] Total	Receipts during year[c]	Value added in construction[d]
Excavating & fndt. work	1972	731	4,068	4,738	41,813	51,347	161,600	109,020
	1977	793	3,795	4,358	45,887	54,939	204,459	139,844
Wrecking & demolition work	1972	62	299	369	2,341	3,165	15,215	13,430
	1977	54	394	465	3,610	4,386	15,546	11,774
Installing bldg. eqpt. N.E.C.	1972	74	1,600	1,943	24,486	30,284	82,350	65,440
	1977	90	1,434	1,698	31,993	37,916	97,002	67,694
Special trade contractors, N.E.C.	1972	605	2,415	3,126	20,241	26,690	77,054	(D)
	1977	636	3,424	3,980	37,275	46,455	144,210	91,393
Subdividers & developers, N.E.C.	1972	155	123	1,202	1,185	9,832	89,123	(D)
	1977	88	283	776	2,599	8,322	26,251	13,639
TOTAL	1972	16,404	106,685	130,828	1,220,662	1,527,569	5,961,230	2,615,296
	1977	16,354	107,420	128,198	1,537,235	1,923,025	7,549,[illegible]35	3,379,784

SOURCE: Bureau of the Census, U.S. Census of Construction Industries, 1977, Area Series, East North Central States (Washington, D.C.: 1980), CC77-A-3, Table 3; and a similar document for 1972.

a. Average for the four payroll periods ended nearest the 15th of March, May, August, and November.

b. In thousands of dollars; includes all forms of cash compensation before deductions for Social Security, income tax, and so forth.

c. In thousands of dollars; includes construction and other receipts.

d. Total receipts less payments for construction work subcontracted to others and payments for materials, components, and supplies.

(D): Withheld to avoid disclosing figures for individual companies.

N.E.C.: not elsewhere classified.

+: Total construction receipts; total receipts figure not available for 1977.

TABLE XIV-9. NUMBER OF ESTABLISHMENTS AND TOTAL EMPLOYMENT IN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS CONTRACT CONSTRUCTION, SUBDIVIDING, AND DEVELOPING, BY INDUSTRY, ANN ARBOR, DETROIT, FLINT, AND GRAND RAPIDS STANDARD METROPOLITAN STATISTICAL AREAS: 1977

	Ann Arbor		Detroit		Flint		Grand Rapids	
Industry	Number of establishments	Total employment	Number of establishments	Total employment	Number of establishments	Total employment	Number of establishments	Total employment
General building contractors and operative builders								
General contractors, residential buildings								
Single-family houses	65	190	963	4,009	138	627	205	1,074
Other residential	3	25	51	467	5	(D)	25	141
Operative buildings	12	57	250	1,405	29	102	63	190
General contractors, nonresidential buildings								
Industrial buildings & warehouses	8	37	167	4,073	15	145	38	739
Nonresidential bldgs. n.e.c.	13	245	253	3,149	27	389	64	699
Heavy construction , general contractors								
Highway & street construction	7	(D)	149	4,465	19	(S)	37	450
Heavy construction, except highways								
Bridge, tunnel, & elev. hwy. construction	1	(D)	12	376	1	(D)	3	(D)
Water, sewer, & ulitity lines	5	122	179	2,927	10	77	37	869
Heavy construction, n.e.c.	6	(D)	91	1,271	2	(D)	6	257
Special trade contractors								
Plumbing, heating	34	362	888	8,362	110	998	145	1,303
Painting, paperhanging & decorating	41	100	356	2,017	39	189	85	358
Elictrical work	56	379	723	6,488	46	432	135	781
Masonry, plastering, & tile setting								
Masonary, stonesetting, & other stonework	44	159	413	2,221	59	271	133	516
Plastering, drywall, & insulation work	21	170	202	2,159	39	266	57	645
Terrazzo, tile, marble, & mosiac work	6	41	79	371	3	(D)	4	(D)

TABLE XIV-9. NUMBER OF ESTABLISHMENTS AND TOTAL EMPLOYMENT IN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS CONTRACT CONSTRUCTION, SUBDIVIDING, AND DEVELOPING, BY INDUSTRY, ANN ARBOR, DETROIT, FLINT, AND GRAND RAPIDS STANDARD METROPOLITAN STATISTICAL AREAS: 1977 (cont.)

Industry	Ann Arbor		Detroit		Flint		Grand Rapids	
	Number of establishments	Total employment	Number of establishments	Total employment	Number of establishments	Total employment	Number of establishments	Total employment
	Special trade contractors (cont.)							
Carpentering and flooring								
Carpentering	9	78	359	3,262	41	(S)	59	172
Floorlaying & other floorwork	2	(D)	87	715	22	70	10	43
Roofing & sheet metal work	23	174	339	3,642	37	441	70	658
Concrete work	6	(S)	397	2,434	49	188	72	365
Water well drilling	2	(D)	40	119	14	55	8	35
Miscellaneous special trade contractors								
Structural steel erection	1	(D)	47	1,004	4	(D)	2	(D)
Glass & glazing work	4	32	73	550	8	95	10	70
Excavating & foundation work	24	75	244	1,805	41	141	46	338
Wrecking & demolition work	2	(D)	25	300	1	(D)	5	27
Installing building equipment, n.e.c.	5	36	39	1,269	5	39	19	214
Special trade contractors, n.e.c.	1	(D)	319	2,430	23	116	81	467
Subdividers & developers, n.e.c.	1	(D)	45	508	5	(D)	6	(S)

SOURCE: Bureau of the Census, Census of Construction Industries, 1977, U.S. Summary (Washington, D.C.: 1980), CC77-A-10, Table 13.

D: Withheld to avoid the possibility of disclosing data for a single company.
n.e.c.: Not elsewhere classified.

TABLE XIV-10. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS CONTRACT CONSTRUCTION, SUBDIVIDING, AND DEVELOPING AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979

	Labor and proprietors' earnings in contract construction			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Kalkaska	18.91	7,387	18.71	8,144
Midland	18.84	113,376	18.13	122,242
Montmorency	14.38	2,929	14.73	3,161
Alcona	17.32	2,894	14.65	2,909
Benzie	11.51	4,268	12.25	5,020
Iron	12.28	5,487	12.16	6,016
Cheboygan	12.88	9,503	12.05	10,328
Leelanau	9.92	3,623	10.50	3,566
Ottawa	9.08	72,487	10.46	95,923
Grand Traverse	9.26	31,073	9.68	36,771
Van Buren	8.39	17,895	9.16	21,533
Emmet	9.49	10,524	9.04	11,305
Missaukee	9.26	2,039	8.72	2,299
Mackinac	4.64	1,794	8.67	2,066
Houghton	8.44	10,256	8.57	11,479
Lake	8.76	1,079	8.22	1,102
Gladwin	8.49	3,172	7.90	3,593
Chippewa	9.20	9,202	7.71	8,202
Livingston	7.68	18,726	7.70	22,135
Clare	8.83	4,936	7.66	4,873
St. Clair	9.92	55,195	7.52	44,305
Oakland	7.42	573,506	7.20	637,973
Muskegon	6.47	57,936	7.16	70,840
Mason	7.12	7,740	7.02	8,668
Clinton	7.06	8,463	6.92	9,368
Antrim	6.82	3,603	6.75	3,993
Oscoda	9.02	1,252	6.48	980
Isabella	5.23	10,833	6.41	14,604
Ogemaw	8.32	3,581	6.28	3,320
Charlevoix	7.16	6,234	6.26	6,152
Eaton	6.20	11,237	6.12	12,460
Alpena	6.01	9,815	6.03	10,912
Baraga	6.20	11,237	6.12	12,460
Kent	6.06	190,154	5.88	215,067
Kalamazoo	5.28	79,360	5.77	98,421

TABLE XIV-10. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS CONTRACT CONSTRUCTION, SUBDIVIDING, AND DEVELOPING AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979 (cont.)

	Labor and proprietors' earnings in contract construction			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Otsego	7.31	5,544	5.74	5,048
Lapeer	4.99	10,895	5.69	13,400
Roscommon	5.58	2,208	5.60	2,515
Bay	5.51	31,978	5.46	34,474
Macomb	5.19	234,486	5.33	258,106
Menominee	5.45	5,277	5.28	5,800
Marquette	6.61	27,734	5.07	23,326
Crawford	4.68	1,441	4.84	1,426
Jackson	4.31	38,789	4.80	47,745
Montcalm	4.02	7,293	4.74	9,308
Ingham	4.53	118,210	4.35	128,361
Iosco	4.42	5,203	4.19	5,333
Berrien	4.50	45,178	4.18	44,513
Delta	4.57	7,628	4.17	7,749
Allegan	4.13	10,512	4.13	11,676
Branch	4.68	10,081	4.08	9,853
Calhoun	3.82	37,431	4.07	43,041
Saginaw	3.79	65,730	3.99	75,227
Manistee	4.32	4,265	3.88	4,201
Wexford	4.10	4,912	3.88	5,125
Gratiot	3.11	6,227	3.88	8,313
Barry	3.90	4,877	3.83	5,446
Newaygo	3.42	3,238	3.80	3,824
Osceola	3.75	2,245	3.79	2,544
Shiawassee	4.06	9,371	3.76	10,100
St. Joseph	3.66	10,018	3.61	11,398
Huron	3.50	5,610	3.55	6,529
Ionia	3.00	5,675	3.48	7,030
Genesee	3.29	128,033	3.43	142,680
Mecosta	4.00	4,172	3.32	3,842
Wayne	3.32	700,609	3.25	732,055
Oceana	3.23	1,867	3.23	2,027
Presque Isle	3.24	1,614	3.20	1,829
Alger	3.45	1,031	3.19	1,053
Tuscola	4.28	8,149	3.19	7,039

TABLE XIV-10. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS CONTRACT CONSTRUCTION, SUBDIVIDING, AND DEVELOPING AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979 (cont.)

	Labor and proprietors' earnings in contract construction			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Hillsdale	3.19	5,437	3.15	5,997
Schoolcraft	3.62	1,177	3.06	1,112
Sanilac	3.32	4,716	3.05	3,824
Washtenaw	3.06	75,289	3.01	83,002
Arenac	2.89	1,031	2.83	1,149
Cass	2.95	5,388	2.75	4,940
Lenawee	2.87	12,534	2.69	13,283
Luce	2.01	741	1.77	722
Ontonagon	(D)	(D)	1.70	972
Monroe	6.22	28,905	(D)	(D)
Dickinson	9.26	13,867	(D)	(D)
Gogebic	(D)	(D)	(D)	(D)
Keweenaw	(D)	(D)	(D)	(D)
Michigan	4.87	3,077,673	4.87	3,376,525
United States	6.06	80,069,000	6.11	90,788,000

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

NOTE: Counties are ranked according to this sector's relative contribution to total labor and proprietors' earnings (next-to-last column). These numbers pertain to earnings generated within the county, irrespective of the residence of the people who received them. For a complete tabulation of earnings at the state level, see Tables VI-3 and VI-4. The earnings residence adjustment for all industries is shown in Table VI-13.

(D): Withheld to avoid disclosing data for individual companies.

TABLE XIV-11. RANKING OF MICHIGAN COUNTIES ACCORDING TO PERCENTAGE CHANGE IN LABOR AND PROPRIETORS' EARNINGS IN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS CONTRACT CONSTRUCTION, SUBDIVIDING, AND DEVELOPING: 1978-1979

	Percentage change			Percentage change	
County	1974-1979	1978-1979	County	1974-1979	1978-1979
Isabella	67	35	Ingham	48	9
Gratiot	46	33	Cheboygan	148	9
Ottawa	239	32	Shiawassee	65	8
Montcalm	101	28	Midland	310	8
Kalamazoo	54	24	Montmorency	103	8
Ionia	58	24	Bay	55	8
Lapeer	104	23	Emmet	54	7
Jackson	54	23	Lenawee	17	6
Muskegon	97	22	Baraga	183	6
Van Buren	45	20	Sanilac	35	5
Benzie	D	18	Wayne	20	4
Grand Traverse	105	18	Wexford	52	4
Newaygo	62	18	Lake	D	2
Livingston	134	18	Iosco	39	2
Huron	62	16	Alger	95	2
Calhoun	88	15	Delta	53	2
St. Joseph	49	14	Alcona	109	1
Roscommon	123	14	Mackinac	D	1
Saginaw	54	14	Berrien	35	-1
Gladwin	73	13	Clare	77	-1
Presque Isle	85	13	Crawford	74	-1
Osceola	103	13	Charlevoix	120	-1
Missaukee	43	13	Manistee	46	-2
Kent	60	13	Leelanau	35	-2
Barry	85	12	Branch	98	-2
Mason	70	12	Luce	105	-3
Houghton	69	12	Schoolcraft	73	-6
Clinton	40	11	Ogemaw	89	-7
Oakland	68	11	Mecosta	8	-8
Allegan	35	11	Cass	65	-8
Alpena	60	11	Otsego	D	-9
Antrim	D	11	Chippewa	71	-11
Genesee	70	11	Tuscola	35	-14
Eaton	89	11	Marquette	42	-16
Arenac	121	11	St. Clair	129	-20
Hillsdale	56	10	Oscoda	18	-22
Washtenaw	53	10	Dickinson	D	D
Menominee	68	10	Gogebic	D	D
Macomb	70	10	Ontonagon	52	D
Kalkaska	215	10	Monroe	D	D
Iron	16	10	Keweenaw	D	D
Oceana	70	9	Michigan	57	10
			United States	62	13

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

D: Withheld to avoid the possibility of disclosing figures for individual companies.

TABLE XIV-12. NUMBER OF RESIDENTIAL AND NONRESIDENTIAL UNITS AUTHORIZED IN MICHIGAN PERMIT ISSUING PLACES, BY CATEGORY: 1977-1980

Category	Number of units 1977	1978	1979	1980
One-family houses	42,265	43,323	33,844	17,985
Two-family buildings	856	1,052	1,046	780
Three- & four-family buildings	1,000	1,223	1,518	999
Five- or more family buildings	14,986	15,412	12,707	9,327
Total	59,057	61,010	49,115	29,091
Moved or relocated residential bldgs.	418	357	418	374
Mobile homes (house trailers)[a]	5,013	5,667	5,572	4,768
Transient hotels, motels, tourist courts and cabins	1,862	1,517	2,204	1,629
Other shelters	68	83	205	123
Amusement & recreational bldgs.	287	210	175	125
Churches & other religious bldgs.	194	202	202	142
Industrial buildings	1,277	1,468	1,450	789
Parking garages (open to gen'l. public)	256	421	246	320
Residential garages & carports	18,290	18,964	17,896	13,241
Service stations & repair garages	180	156	141	118
Hospitals & other inst'l. bldgs.	84	82	77	42
Office, bank, & professional bldgs.	657	720	739	542
Public works & utilities bldgs.	106	125	123	83
Schools & other educational bldgs.	60	73	66	42
Stores & other mercantile bldgs.	1,636	1,502	1,509	934
Other nonresidential buildings	5,336	6,221	6,756	5,734
Structures other than buildings	6,787	6,443	5,505	5,149
Additions, alterations, & conversions				
Housekeeping residential buildings	55,969	55,430	56,519	50,793
All other buildings & structures	11,977	12,878	12,805	12,714

SOURCE: Bureau of the Census, special release.

a. Includes only house trailers for which building permits are issued.

TABLE XIV-13. VALUATION OF RESIDENTIAL AND NONRESIDENTIAL UNITS AUTHORIZED IN MICHIGAN PERMIT ISSUING PLACES, BY CATEGORY: 1977-1980

(millions of dollars)

Michigan

Category	1977	1978	1979	1980
One family houses	1,516.8	1,758.9	1,548.2	877.0
Two-family buildings	17.5	23.8	29.8	25.1
Three-and four-family buildings	21.7	27.3	36.8	31.1
Five- or more family buildings	256.4	294.2	280.6	234.2
Total	1,812.5	2,104.4	1,895.7	1,167.3
Moved or relocated residential buildings	2.6	2.1	3.5	2.5
Mobile homes (house trailers)	28.7	30.8	34.0	29.8
Transient hotels, motels, tourist courts and cabins	36.3	20.6	43.1	51.8
Other shelters	1.4	0.4	1.6	.9
Amusement and recreational buildings	34.1	36.3	59.3	11.9
Churches and other religious buildings	31.3	34.5	46.4	30.1
Industrial buildings	298.9	432.9	528.1	322.1
Parking garages (open to general public)	13.8	9.3	19.2	15.3
Residential garages and carports	58.0	66.5	67.2	53.0
Service stations and repair garages	4.3	6.7	5.2	4.8
Hospitals and other institutional buildings	86.9	82.8	62.7	51.9
Office, bank, and professional buildings	156.7	156.8	222.6	260.8
Public works and utilities buildings	25.9	53.1	21.7	74.0
Schools and other educational buildings	17.4	15.7	11.7	37.9
Stores and other mercantile buildings	207.9	249.4	296.3	158.1
Other nonresidential buildings	38.3	45.6	54.6	51.3
Structures other than buildings	31.7	32.4	30.8	23.9
Housekeeping residential buildings	173.7	197.6	233.1	240.9
All other buildings and structures	135.9	165.5	189.1	537.3

SOURCE: Bureau of the Census, Special release.

TABLE XIV-14. STATES RANKED ACCORDING TO 1979 DOLLAR VOLUME OF INDUSTRIAL BUILDING PERMITS.

State	1979		1980 Preliminary	
	Buildings	Cost	Buildings	Cost
California	5,350	1,702,967	3,702	1,207,109
Texas	1,761	561,576	1,558	529,169
New York	783	556,560	607	241,836
Michigan	1,454	528,581	752	309,709
Illinois	1,440	474,744	840	431,916
Ohio	1,251	365,869	735	430,399
Pennsylvania	1,142	323,307	738	231,830
Minnesota	839	279,641	395	160,929
Indiana	782	276,466	613	227,765
Florida	1,140	272,285	1,285	439,658
New Jersey	716	268,615	499	252,924
North Carolina	734	266,896	506	187,988
Wisconsin	862	243,840	478	114,772
Georgia	639	240,773	417	180,119
Washington	836	224,848	577	221,890
Virginia	504	224,632	374	162,495
Arizona	454	188,152	433	160,194
Massachusetts	508	177,447	522	231,089
Kentucky	315	162,123	254	766,126
Colorado	675	160,302	471	111,925
South Carolina	268	156,365	185	129,185
Tennessee	392	155,534	243	109,269
Oregon	595	144,771	421	119,910
Iowa	588	140,536	364	413,644
Missouri	396	136,678	306	233,842
Louisiana	673	130,929	413	113,490
Connecticut	396	124,763	245	72,483
Kansas	403	118,847	254	55,300
Utah	428	95,106	286	39,535
Oklahoma	274	86,643	266	48,129
Alabama	238	84,905	246	105,204
Maryland	243	78,294	198	111,814
Maine	127	74,022	66	17,448
New Hampshire	125	69,455	89	20,117
Arkansas	190	54,609	162	35,136
Idaho	157	50,531	112	60,635
Nevada	238	47,388	185	54,667
Nebraska	362	43,939	224	28,204
Vermont	77	33,237	22	5,224
North Dakota	148	30,837	92	16,974
New Mexico	172	27,708	167	74,221
Hawaii	91	26,313	73	23,468
Rhode Island	86	26,144	57	15,841
Wyoming	119	24,519	96	18,777
Mississippi	140	23,524	98	25,881
Delaware	71	21,674	34	22,638
Alaska	38	8,897	18	6,209
South Dakota	93	8,762	74	7,335
Montana	72	8,432	40	2,655
West Virginia	49	5,274	28	6,111
Dist. of Columbia	0	0	2	20

SOURCE: Bureau of the Census, special release.

TABLE XIV-15. STATES RANKED ACCORDING TO 1979 DOLLAR VOLUME OF OFFICE BUILDING PERMITS.

State	1979		1980 Preliminary	
	Buildings	Cost	Buildings	Cost
California	3,398	1,572,253	2,734	1,884,687
Texas	2,705	1,314,553	2,489	1,621,359
Illinois	807	496,381	511	443,221
Washington	816	407,544	543	320,486
Ohio	798	351,255	524	214,854
Minnesota	442	305,669	247	200,529
Florida	1,324	293,743	1,409	449,652
Virginia	675	285,082	533	197,291
New Jersey	347	284,273	347	696,803
Colorado	589	278,959	401	328,338
Pennsylvania	501	274,805	307	322,530
Michigan	740	222,636	498	257,116
New York	338	212,865	223	466,039
Louisiana	673	130,929	615	202,047
Georgia	694	172,913	544	286,907
Connecticut	225	170,545	132	87,334
Massachusetts	278	164,949	229	136,895
Oregon	615	160,038	388	125,397
Arizona	491	152,814	478	183,384
Oklahoma	408	131,903	380	181,705
Maryland	249	129,364	177	129,236
North Carolina	619	127,080	515	124,552
Missouri	368	126,160	273	82,482
Kansas	276	114,969	209	89,912
Wisconsin	398	112,733	283	125,964
Tennessee	372	105,310	320	98,900
Utah	267	96,678	209	86,512
Dist. of Columbia	16	89,199	27	109,116
Indiana	340	75,412	256	113,842
Alabama	374	72,663	281	53,883
Nevada	184	64,426	191	65,317
Arkansas	165	63,465	210	24,054
Iowa	245	61,531	214	57,444
Kentucky	222	52,250	170	83,620
New Mexico	187	45,289	158	59,069
Hawaii	88	43,341	54	43,091
Nebraska	182	38,708	86	33,018
South Carolina	295	36,873	250	54,197
Mississippi	209	30,373	151	56,261
Montana	120	29,163	60	11,071
Wyoming	108	27,174	102	20,765
Idaho	128	20,671	81	16,897
North Dakota	70	19,658	56	17,228
New Hampshire	70	18,216	38	7,630
Alaska	52	14,595	40	22,114
Maine	48	13,992	20	4,557
South Dakota	79	13,140	51	7,750
West Virginia	79	11,714	90	19,144
Rhode Island	63	10,896	34	7,105
Delaware	46	8,606	50	55,716
Vermont	41	6,660	11	2,305

SOURCE: Bureau of the Census, special release.

TABLE XIV-16. STATES RANKED ACCORDING TO 1979 DOLLAR VOLUME OF MERCANTILE BUILDING PERMITS.

State	1979		1980 Preliminary	
	Buildings	Cost	Buildings	Cost
California	4,999	1,349,018	3,500	976,381
Texas	5,180	1,194,956	4,064	1,013,932
Florida	3,402	606,609	2,939	487,157
Illinois	1,595	344,345	983	247,491
Ohio	1,461	338,532	930	178,831
Michigan	1,515	297,117	882	150,311
Virginia	1,059	283,955	867	185,460
Washington	1,048	248,014	656	194,198
Pennsylvania	1,213	233,310	918	224,772
Arizona	1,172	226,189	1,061	193,397
Colorado	1,114	223,626	1,421	152,780
New York	1,150	200,691	757	126,466
North Carolina	1,588	196,426	949	133,511
Georgia	1,089	193,696	812	149,712
Indiana	1,041	191,014	652	170,532
New Jersey	640	189,840	426	73,660
Minnesota	909	183,936	410	114,784
Oklahoma	902	166,738	731	149,262
Oregon	676	153,193	490	84,893
Wisconsin	772	149,186	505	95,556
Missouri	688	148,776	506	119,699
Louisiana	954	135,030	665	87,049
South Carolina	976	124,386	849	102,306
Iowa	787	121,051	416	51,550
Maryland	478	117,391	334	154,750
Alabama	688	113,816	653	77,728
Tennessee	760	112,762	451	135,477
Massachusetts	529	109,540	332	53,466
Kansas	498	104,432	340	55,624
Utah	387	91,860	482	73,050
Nevada	281	84,565	230	71,732
Kentucky	431	76,124	362	48,869
Nebraksa	495	63,945	343	34,837
Arkansa	416	63,377	291	34,292
New Mexico	385	58,996	292	48,049
Hawaii	113	57,970	71	27,346
Mississippi	525	53,990	367	55,301
North Dakota	272	52,272	224	21,104
Connecticut	240	46,698	172	47,041
Idaho	281	38,500	244	27,202
West Virginia	170	34,576	113	29,236
Wyoming	158	31,588	149	31,860
South Dakota	232	26,842	100	7,373
Alaska	118	23,679	99	16,036
Montana	160	22,860	66	14,751
Delaware	180	17,894	104	8,743
Maine	201	15,438	71	5,224
New Hampshire	133	15,352	70	8,871
Rhode Island	86	10,463	39	3,501
Vermont	64	5,519	46	9,833
Dist. of Columbia	13	2,940	18	2,674

SOURCE: Bureau of the Census, special release.

TABLE XIV-18. NUMBER OF NEW PRIVATELY OWNED HOUSING UNITS AUTHORIZED IN PERMIT ISSUING PLACES IN MICHIGAN STANDARD METROPOLITAN STATISTICAL AREAS: 1973-1979 AND PRELIMINARY 1980

SMSA	Year	In structures with 1 unit	2 units	3 and 4 units	5 units or more	Total
Ann Arbor	1973	1,081	30	119	1,445	2,675
	1974	740	74	4	1,021	1,839
	1975	556	8	0	69	633
	1976	821	4	0	280	1,105
	1977	1,266	18	0	386	1,670
	1978	1,460	16	0	914	2,390
	1979	1,078	30	23	171	1,302
	1980	452	22	4	442	920
Battle Creek	1973	627	2	20	779	1,428
	1974	424	6	0	61	491
	1975	418	6	0	230	654
	1976	651	10	0	300	961
	1977	554	4	20	267	845
	1978	534	2	44	201	781
	1979	497	18	70	246	831
	1980	301	10	0	424	735
Bay City	1973	615	8	24	633	1,280
	1974	445	2	4	363	814
	1975	403	6	0	72	481
	1976	458	2	12	350	822
	1977	525	2	0	0	527
	1978	494	6	0	0	500
	1979	309	10	27	0	346
	1980	149	0	0	0	149
Detroit	1973	14,946	380	1,287	16,010	32,433
	1974	9,735	160	259	7,924	18,078
	1975	9,964	74	165	3,801	13,004
	1976	13,070	80	300	4,764	18,214
	1977	18,239	106	471	5,895	24,711
	1978	18,625	100	628	7,056	26,409
	1979	13,645	208	648	5,554	20,050
	1980	5,649	108	469	3,411	9,637
Flint	1973	2,349	32	140	2,137	4,658
	1974	1,450	30	127	341	1,948
	1975	1,206	4	11	264	1,485
	1976	1,447	8	8	398	1,861
	1977	2,067	8	60	1,147	3,282
	1978	2,192	12	19	1,054	3,277
	1979	1,577	32	71	601	2,281
	1980	872	14	16	341	1,243
Grand Rapids	1973	2,625	146	63	2,439	5,273
	1974	2,209	82	40	1,229	3,560
	1975	2,141	184	96	1,006	3,427
	1976	2,325	274	65	1,147	3,811
	1977	2,775	280	58	1,450	4,563
	1978	3,106	438	115	2,173	5,832
	1979	2,554	302	174	1,093	4,123
	1980	1,700	250	58	618	2,626

TABLE XIV-18. NUMBER OF NEW PRIVATELY OWNED HOUSING UNITS AUTHORIZED IN PERMIT ISSUING PLACES IN MICHIGAN STANDARD METROPOLITAN STATISTICAL AREAS: 1973-1979 AND PRELIMINARY 1980 (cont.)

SMSA	Year	In structures with				Total
		1 unit	2 units	3 and 4 units	5 units or more	
Jackson	1973	656	20	26	164	866
	1974	627	8	11	24	670
	1975	427	4	10	449	890
	1976	612	36	18	250	916
	1977	544	0	3	630	1,177
	1978	529	6	0	128	663
	1979	615	10	7	139	771
	1980	185	6	--	54	245
Kalamazoo-Portage	1973	1,089	58	88	418	1,653
	1974	692	82	48	476	1,298
	1975	823	34	43	755	1,655
	1976	937	34	75	926	1,972
	1977	1,271	18	154	1,197	2,640
	1978	1,117	22	111	424	1,674
	1979	996	10	112	750	1,838
	1980	5,750	110	469	3,432	9,761
Lansing-East Lansing	1973	2,659	254	126	2,646	5,685
	1974	1,486	132	20	805	2,443
	1975	1,266	84	31	484	1,865
	1976	1,620	136	55	698	2,509
	1977	2,144	100	78	1,478	3,800
	1978	2,013	138	130	1,174	3,455
	1979	2,237	122	190	1,437	3,986
	1980	1,292	76	92	740	2,200
Muskegon-Muskegon Heights-Norton Shores	1973	577	10	25	297	909
	1974	470	22	12	188	692
	1975	639	0	0	0	639
	1976	662	36	24	441	1,163
	1977	747	6	0	120	873
	1978	852	12	0	309	1,173
	1979	620	10	12	32	674
	1980	340	8	0	384	732
Saginaw	1973	1,052	44	25	1,036	2,157
	1974	793	32	31	318	1,174
	1975	660	66	32	127	885
	1976	776	122	8	135	1,041
	1977	875	112	36	320	1,343
	1978	955	104	16	176	1,251
	1979	708	146	0	396	1,250
	1980	203	40	120	0	363

SOURCE: Bureau of the Census, Construction Reports, Permits--Housing Authorized by Building Permits and Public Contracts, 1973 through 1980 (Washington, D.C.: annually), Table 3 (1980); and Bureau of the Census, special release.

TABLE XIV-19. VALUATION OF NEW PRIVATELY OWNED HOUSING UNITS AUTHORIZED IN PERMIT ISSUING PLACES IN MICHIGAN STANDARD METROPOLITAN STATISTICAL AREAS: 1973-1979 AND PRELIMINARY 1980

(In thousands of dollars)

		In structures with				
SMSA	Year	1 unit	2 units	3 and 4 units	5 units or more	Total
Ann Arbor	1973	29,612	440	2,371	18,609	51,031
	1974	24,242	1,758	50	13,474	39,523
	1975	20,165	154	0	1,086	21,405
	1976	28,613	58	0	3,507	32,179
	1977	48,267	357	0	7,125	55,749
	1978	65,889	391	0	14,960	81,241
	1979	59,770	1,222	1,039	3,341	65,378
	1980	31,281	939	157	12,852	45,230
Battle Creek	1973	12,998	21	255	5,635	18,910
	1974	9,307	96	67	762	10,232
	1975	10,436	118	0	1,706	12,259
	1976	18,812	218	0	3,140	22,170
	1977	17,257	85	364	3,112	20,818
	1978	17,561	72	1,081	2,230	21,843
	1979	18,657	585	1,520	3,076	23,838
	1980	13,825	292	0	8,366	22,483
Bay City	1973	12,238	112	530	7,088	19,968
	1974	9,951	28	50	4,486	14,516
	1975	9,342	123	0	922	10,387
	1976	12,122	30	185	3,299	15,636
	1977	16,049	25	0	0	16,074
	1978	17,251	75	0	0	17,326
	1979	12,774	282	1,119	0	14,175
	1980	6,085	0	0	0	6,085
Detroit	1973	419,881	6,301	25,442	229,613	681,237
	1974	302,828	2,423	4,709	144,601	454,560
	1975	334,864	1,236	2,471	72,278	420,849
	1976	487,264	1,390	6,662	90,723	586,039
	1977	754,541	2,261	11,286	127,298	895,387
	1978	877,358	2,337	14,434	156,342	1,050,469
	1979	730,391	6,134	15,015	138,104	889,645
	1980	342,234	4,225	16,529	90,512	453,500
Flint	1973	56,210	561	1,922	21,986	80,678
	1974	36,359	431	1,672	3,245	41,708
	1975	33,005	64	194	2,667	35,929
	1976	40,549	248	96	6,409	47,302
	1977	65,605	283	1,169	12,955	80,011
	1978	80,283	259	444	16,238	97,224
	1979	66,107	1,156	1,936	11,349	80,551
	1980	36,395	375	571	10,020	47,361
Grand Rapids	1973	68,698	2,075	1,072	25,985	97,830
	1974	61,648	1,255	552	13,779	77,234
	1975	63,566	3,144	1,293	10,231	78,233
	1976	74,150	4,848	1,129	14,664	94,791
	1977	99,326	5,432	905	17,443	123,106
	1978	123,887	9,754	2,325	33,386	169,352
	1979	120,300	8,496	3,865	22,277	154,937
	1980	83,884	8,486	1,477	14,723	108,570

TABLE XIV-19. VALUATION OF NEW PRIVATELY OWNED HOUSING UNITS AUTHORIZED IN PERMIT ISSUING PLACES IN MICHIGAN STANDARD METROPOLITAN STATISTICAL AREAS: 1973-1979 AND PRELIMINARY 1980 (cont.)

(In thousands of dollars)

		In structures with				
SMSA	Year	1 unit	2 units	3 and 4 units	5 units or more	Total
Jackson	1973	13,393	174	358	1,789	15,715
	1974	13,624	102	145	270	14,140
	1975	9,592	80	167	5,569	15,408
	1976	14,511	476	272	3,738	18,997
	1977	15,648	0	60	7,515	23,223
	1978	17,560	114	0	1,554	19,228
	1979	21,290	186	191	2,566	24,232
	1980	6,544	188	--	1,022	7,754
Kalamazoo-Portage	1973	25,868	1,196	1,430	4,618	33,111
	1974	19,742	1,150	822	5,747	27,460
	1975	27,097	632	729	8,482	36,940
	1976	32,420	708	1,342	13,346	47,816
	1977	45,280	472	2,762	20,318	68,831
	1978	47,307	403	1,978	6,851	56,540
	1979	46,021	293	2,329	12,568	61,211
	1980	436,526	4,249	16,529	90,767	453,957
Lansing-East Lansing	1973	62,760	4,753	2,080	28,006	97,599
	1974	39,002	2,500	343	11,882	53,726
	1975	38,452	1,705	789	5,762	46,709
	1976	52,967	3,563	1,222	7,996	65,749
	1977	74,916	2,862	2,668	22,066	102,512
	1978	80,384	4,177	3,348	18,593	106,503
	1979	97,525	4,437	5,168	27,911	135,041
	1980	60,017	2,488	3,493	18,621	84,622
Muskegon-Muskegon Heights-Norton Shores	1973	10,851	128	392	1,970	13,343
	1974	10,290	243	227	1,036	11,796
	1975	15,146	0	0	0	15,146
	1976	16,471	431	360	4,745	22,008
	1977	21,762	95	0	1,000	22,857
	1978	26,935	238	0	5,768	32,940
	1979	23,650	240	175	680	24,745
	1980	15,688	217	0	10,437	26,343
Saginaw	1973	25,433	514	373	11,473	37,792
	1974	20,619	414	365	3,507	24,905
	1975	19,327	1,204	386	1,595	22,511
	1976	24,027	2,081	108	1,330	27,546
	1977	29,251	1,927	293	6,039	37,510
	1978	35,896	1,946	299	2,139	40,280
	1979	29,803	3,844	0	7,669	41,316
	1980	9,139	1,122	2,018	0	12,278

SOURCE: Bureau of the Census, Construction Reports, Permits--Housing Authorized by Building Permits and Public Contracts, 1973 through 1979 (Washington, D.C.: annually), Table 3 (1977); and Bureau of the Census, special release.

TABLE XIV-20. NUMBER OF NEW PRIVATELY OWNED HOUSING UNITS AUTHORIZED IN PERMIT ISSUING PLACES IN MICHIGAN STANDARD METROPOLITAN STATISTICAL AREAS, INSIDE AND OUTSIDE OF CENTRAL CITIES: PRELIMINARY 1980

SMSA	In structures with				Total
	1 unit	2 units	3 and 4 units	5 units or more	
Ann Arbor	452	22	4	442	920
Ann Arbor	62	16	4	202	285
Outside central city	390	6	0	240	635
Battle Creek	301	10	--	424	735
Battle Creek	5	2	--	287	294
Outside central city	296	8	--	137	441
Bay City	149	--	--	--	149
Bay City	15	--	--	--	15
Outside central city	134	--	--	--	134
Detroit	5,649	106	430	3,355	9,540
Detroit	13	--	20	895	928
Outside central city	5,636	106	410	--	--
Flint	843	14	16	341	1,243
Flint	13	2	--	--	15
Outside central city	830	12	16	34	1,228
Grand Rapids	1,700	250	58	618	2,626
Grand Rapids	188	24	--	143	355
Outside central city	1,512	226	58	475	2,271
Jackson	185	6	--	54	245
Jackson	0	0	0	0	0
Outside central city	185	6	0	54	245
Kalamazoo-Portage	521	30	79	901	1,531
Kalamazoo	50	1	23	405	478
Portage	90	--	44	300	434
Outside central cities	381	30	12	196	619
Lansing-East Lansing	1,290	76	92	740	2,200
Lansing	230	34	--	233	497
East Lansing	105	10	4	--	119
Outside central cities	955	32	88	507	1,584
Muskegon-Muskegon Heights-Norton Shores	340	8	1	384	732
Muskegon	12	--	--	1	13
Muskegon Heights	--	--	--	--	--
Norton Shores	60	--	--	--	60
Outside central cities	268	8	--	383	659
Saginaw	203	40	120	--	363
Saginaw	3	--	4	--	7
Outside central city	200	40	116	--	356

SOURCE: Bureau of the Census, special release.

TABLE XIV-21. ANNUAL CONSTRUCTION CONTRACT AWARDS IN MICHIGAN, 1964-1980, AND THE UNITED STATES, 1978, 1979, AND 1980

(in thousands of dollars)

Year	Non-residential	Residential	Total building	Public works and utilities	Total construction
			Michigan		
1964	788,533	741,977	1,530,510	317,401	1,848,411
1965	766,258	1,038,356	1,814,614	465,073	2,279,686
1966	930,000	835,030	1,765,100	333,200	2,098,330
1967	946,513	1,020,000	1,966,513	357,000	2,323,513
1968	912,849	1,029,581	1,942,430	407,537	2,349,967
1969	962,697	891,531	1,854,228	874,715	2,728,943
1970	955,592	942,760	1,898,352	1,052,245	2,950,597
1971	874,058	1,319,978	2,194,036	840,719	3,034,755
1972	1,010,891	1,596,633	2,607,524	842,780	3,450,304
1973	1,206,481	1,856,354	3,062,835	1,299,276	4,362,111
1974	1,355,623	1,314,147	2,669,770	791,628	3,461,398
1975	951,139	1,089,145	2,040,284	1,146,796	3,187,080
1976	1,115,512	1,470,420	2,585,932	590,478	3,176,410
1977	1,525,733	2,144,489	3,670,222	604,463	4,274,685
1978	1,752,267	2,469,130	4,221,397	1,821,304	6,042,701
1979	1,975,434	2,392,063	4,367,497	889,324	5,156,821
1980	1,933,378	1,545,615	3,478,993	660,249	4,139,252
			United States		
1978	45,045,834	74,949,473	119,995,307	39,934,701	159,930,008
1979	50,205,900	74,557,500	124,763,400	43,682,500	168,445,900
1980	52,344,900	63,206,000	115,550,900	31,612,900	147,163,800

SOURCE: F. W. Dodge Division of McGraw-Hill Information Systems Company, special release.

TABLE XIV-17. NUMBER AND VALUATION OF NEW HOUSING UNITS AUTHORIZED IN PERMIT ISSUING PLACES IN MICHIGAN: 1972-1979 AND PRELIMINARY 1980

		Privately owned					
		In structures with					
Year		1 unit	2 units	3 and 4 units	5 units or more	Total	Publicly owned (contract awards)
1972	No. of housing units	42,252	1,434	2,414	29,947	76,047	550
	Valuation ($000)	968,198	23,545	38,528	377,425	1,407,696	10,908
1973	No. of housing units	37,622	1,232	2,288	30,116	71,258	--
	Valuation ($000)	935,621	19,930	39,065	378,694	1,373,310	--
1974	No. of housing units	26,793	864	728	15,806	44,191	100
	Valuation ($000)	714,199	13,759	11,192	227,254	966,405	2,360
1975	No. of housing units	26,885	598	524	8,762	36,769	211
	Valuation ($000)	792,694	10,550	7,633	130,582	941,459	3,903
1976	No. of housing units	33,093	906	729	11,167	45,893	--
	Valuation ($000)	1,059,841	17,059	13,592	173,427	1,263,919	--
1977	No. of housing units	42,265	856	1,000	14,936	59,057	--
	Valuation ($000)	1,516,811	17,530	21,786	256,438	1,812,567	--
1978	No. of housing units	43,323	1,052	1,223	15,412	61,010	--
	Valuation ($000)	1,758,970	23,820	27,362	294,264	2,104,418	--
1979	No. of housing units	33,926	1,046	1,522	12,715	49,209	48
	Valuation ($000)	1,552,062	29,889	36,971	280,931	1,899,854	2,518
1980	No. of housing units	16,793	723	1,004	8,917	27,442	--
	Valuation ($000)	830,254	23,693	31,489	228,083	1,113,518	--

SOURCE: Bureau of Census, Construction Reports, Permits-Housing Authorized by Building Permits and Public Contracts, 1972 through 1979 (Washington, D.C.: annually), Table 2 (1979); and Bureau of the Census, special release.

TABLE XIV-22. NONRESIDENTIAL AND RESIDENTIAL BUILDING AWARDS IN MICHIGAN STANDARD METROPOLITAN STATISTICAL AREAS: 1979 AND 1980

Area	Nonresidential		Residential		Total	
	1979	1980	1979	1980	1979	1980
Ann Arbor	78,962	104,367	81,200	58,279	160,162	162,646
Battle Creek	33,398	31,729	42,252	22,683	75,640	54,412
Bay City	12,030	17,217	16,880	18,294	28,910	35,511
Detroit	1,023,212	1,043,137	1,096,892	589,379	2,120,104	1,632,516
Flint	83,288	87,568	97,685	47,675	180,973	135,243
Grand Rapids	263,080	173,926	171,647	149,013	443,727	332,939
Jackson	20,296	43,806	35,325	11,124	55,621	54,930
Kalamazoo-Portage	59,530	46,954	68,378	69,909	127,908	116,863
Lansing-E. Lansing	98,270	157,744	159,676	129,550	257,946	287,294
Muskegon-Muskegon Heights-Norton Shores	21,361	15,925	26,255	28,139	47,616	44,064
Saginaw	39,548	41,390	51,974	37,116	91,522	78,506
Toledo	237,124	158,382	187,361	146,383	424,485	304,765
Michigan[a]	1,975	1,933	2,392	1,546	4,367	3,479
United States[a]	50,206	52,345	74,558	63,206	124,763	115,551

SOURCE: F. W. Dodge Division of McGraw-Hill Information Systems Company, news release.

a: In millions of dollars.

TABLE XIV-23. RESIDENTIAL, INDUSTRIAL, OFFICE, AND MERCANTILE CONSTRUCTION AUTHORIZED BY BUILDING PERMITS AND PUBLIC CONTRACTS IN MICHIGAN, BY COUNTY: 1977-1979 AND 1980 PRELIMINARY

		Residential		Industrial[a]		Offices[b]		Mercantile[c]	
County	Year	Number of dwellings	Value ($000)	Number of buildings	Value ($000)	Number of buildings	Value ($000)	Number of buildings	Value ($000)
Alcona	1977	142	3,376	0	0	0	0	1	20
	1978	163	4,211	3	124	6	572	3	130
	1979	134	3,734	2	17	1	20	2	300
	1980	62	2,250	0	0	0	0	0	0
Alger	1977	81	2,495	0	0	0	0	9	1,090
	1978	75	2,632	0	0	0	0	10	1,283
	1979	63	2,296	0	0	0	0	12	1,576
	1980	39	1,482	0	0	0	0	11	1,053
Allegan	1977	435	11,659	10	830	4	329	9	704
	1978	372	12,185	22	1,412	3	292	11	793
	1979	359	11,616	19	1,718	5	348	5	350
	1980	225	7,482	17	501	1	10	6	1,005
Alpena	1977	281	6,975	2	77	0	0	9	623
	1978	301	7,675	4	362	3	306	8	923
	1979	321	11,897	4	239	2	382	12	3,700
	1980	74	3,187	1	65	0	0	7	755
Antrim	1977	204	6,457	3	49	0	0	7	191
	1978	250	8,518	5	273	4	171	9	442
	1979	235	8,410	4	391	3	341	1	28
	1980	186	7,496	3	147	3	164	5	302
Arenac	1977	63	1,370	4	386	3	188	8	73
	1978	97	2,184	0	0	2	868	3	212
	1979	89	2,517	4	364	4	782	5	434
	1980	51	1,350	1	39	2	275	2	130
Baraga	1977	49	972	2	10	0	0	1	18
	1978	31	780	1	24	0	0	4	194
	1979	25	743	2	18	0	0	0	0
	1980	20	592	3	171	0	0	1	2
Barry	1977	196	4,624	4	174	3	190	2	205
	1978	277	5,823	3	133	1	36	1	12
	1979	288	8,004	3	75	3	239	3	29
	1980	188	6,388	1	50	2	1,671	2	181

TABLE XIV-23. RESIDENTIAL, INDUSTRIAL, OFFICE, AND MERCANTILE CONSTRUCTION AUTHORIZED BY BUILDING PERMITS AND PUBLIC CONTRACTS IN MICHIGAN, BY COUNTY: 1977-1979 AND 1980 PRELIMINARY (cont.)

County	Year	Residential		Industrial[a]		Offices[b]		Mercantile[c]	
		Number of dwellings	Value ($000)	Number of buildings	Value ($000)	Number of buildings	Value ($000)	Number of buildings	Value ($000)
Bay	1977	527	16,074	9	1,574	11	897	18	1,967
	1978	500	17,326	7	848	10	767	22	2,736
	1979	346	14,175	19	2,806	8	731	18	1,508
	1980	193	7,958	6	6,799	3	318	7	347
Benzie	1977	147	3,877	0	0	1	80	3	420
	1978	140	3,808	1	129	0	0	3	60
	1979	113	3,106	2	220	3	390	3	254
	1980	83	2,574	0	0	1	426	1	15
Berrien	1977	825	21,572	30	2,435	7	1,242	36	3,620
	1978	585	19,454	44	4,373	12	1,756	24	11,272
	1979	538	16,992	44	3,285	14	3,011	20	5,285
	1980	240	10,253	29	2,152	2	448	18	2,190
Branch	1977	199	4,627	7	474	1	125	15	339
	1978	175	4,330	17	2,049	2	195	6	296
	1979	164	3,956	11	277	2	195	7	508
	1980	84	2,287	1	545	0	0	6	4,227
Calhoun	1977	649	16,194	24	2,406	10	1,814	13	699
	1978	504	16,020	28	8,463	7	1,279	35	1,396
	1979	543	15,835	32	3,671	12	1,756	20	3,005
	1980	504	13,878	9	1,254	15	3,274	18	2,781
Cass	1977	246	7,121	6	369	6	549	5	197
	1978	218	7,256	12	2,121	3	106	4	45
	1979	263	7,372	14	1,104	1	37	1	49
	1980	243	8,227	2	111	0	0	2	326
Charlevoix	1977	184	5,124	5	469	1	75	1	700
	1978	175	5,942	1	54	0	0	12	7,219
	1979	125	4,578	0	0	0	0	8	6,317
	1980	80	3,006	0	0	0	0	9	4,495
Cheboygan	1977	187	5,635	0	0	0	0	3	392
	1978	198	7,175	1	800	0	0	3	1,713
	1979	203	6,697	2	30	0	0	7	3,213
	1980	121	5,121	1	324	3	1,113	2	404

TABLE XIV-23. RESIDENTIAL, INDUSTRIAL, OFFICE, AND MERCANTILE CONSTRUCTION AUTHORIZED BY BUILDING PERMITS AND PUBLIC CONTRACTS IN MICHIGAN, BY COUNTY: 1977-1979 AND 1980 PRELIMINARY (cont.)

		Residential		Industrial[a]		Offices[b]		Mercantile[c]	
County	Year	Number of dwellings	Value ($000)	Number of buildings	Value ($000)	Number of buildings	Value ($000)	Number of buildings	Value ($000)
Chippewa	1977	33	754	2	114	1	100	1	592
	1978	36	921	1	146	0	0	1	180
	1979	100	2,404	1	287	1	162	2	432
	1980	12	391	3	264	0	0	1	994
Clare	1977	149	4,852	0	0	1	600	4	502
	1978	239	6,418	0	0	0	0	4	493
	1979	246	6,202	0	0	1	361	1	156
	1980	141	3,929	0	0	0	0	2	404
Clinton	1977	337	10,085	3	355	2	343	4	812
	1978	281	10,479	5	198	2	375	4	620
	1979	460	13,806	3	26	2	300	8	778
	1980	298	11,264	2	144	3	223	8	1,100
Crawford	1977	165	3,807	1	25	2	225	10	83
	1978	133	3,036	0	0	1	168	8	235
	1979	134	3,139	2	148	2	265	7	324
	1980	106	2,550	0	0	0	0	3	69
Delta	1977	473	11,576	7	405	2	237	5	206
	1978	247	7,479	5	1,294	6	1,767	9	1,130
	1979	200	6,124	9	1,766	8	524	6	541
	1980	125	4,099	3	695	2	191	7	216
Dickinson	1977	102	3,401	1	30	0	0	1	243
	1978	48	1,914	2	1,512	1	99	6	374
	1979	30	1,168	1	127	2	74	2	325
	1980	45	1,113	1	52	1	15	1	3
Eaton	1977	1,161	33,086	5	4,160	6	1,090	10	415
	1978	1,277	37,401	12	8,571	6	430	16	6,314
	1979	925	31,168	16	14,255	7	3,248	32	3,075
	1980	358	15,653	14	10,286	14	3,639	10	2,106
Emmet	1977	60	1,625	1	170	3	4,152	5	1,626
	1978	175	4,893	1	9,000	0	0	2	140
	1979	133	3,347	0	0	0	0	1	100
	1980	259	11,599	3	382	2	982	2	152

TABLE XIV-23. RESIDENTIAL, INDUSTRIAL, OFFICE, AND MERCANTILE CONSTRUCTION AUTHORIZED BY BUILDING PERMITS AND PUBLIC CONTRACTS IN MICHIGAN, BY COUNTY: 1977-1979 AND 1980 PRELIMINARY (cont.)

County	Year	Residential		Industrial[a]		Offices[b]		Mercantile[c]	
		Number of dwellings	Value ($000)	Number of buildings	Value ($000)	Number of buildings	Value ($000)	Number of buildings	Value ($000)
Genesee	1977	2,993	70,109	33	14,055	49	10,417	82	11,883
	1978	2,971	86,110	35	9,023	40	7,721	66	8,159
	1979	2,044	71,632	32	22,718	51	11,679	105	21,184
	1980	831	34,759	13	6,538	38	4,415	58	16,002
Gladwin	1977	238	7,681	0	0	0	0	0	0
	1978	217	7,911	2	97	3	475	5	313
	1979	171	6,889	1	114	0	0	3	307
	1980	188	8,434	0	0	1	30	35	7,078
Gogebic	1977	78	2,036	0	0	1	158	0	0
	1978	90	2,577	1	17	0	0	0	0
	1979	61	1,807	0	0	0	0	0	0
	1980	41	1,219	1	89	1	600	1	50
Grand Traverse	1977	964	25,698	21	1,489	16	1,947	45	5,120
	1978	1,035	32,531	21	1,654	7	1,303	47	5,063
	1979	666	24,005	21	2,122	10	1,112	40	5,775
	1980	758	26,124	16	2,400	19	1,798	5	388
Gratiot	1977	181	3,841	1	51	1	6	5	1,872
	1978	164	3,813	5	465	5	418	6	891
	1979	99	3,005	12	2,606	5	1,386	11	1,207
	1980	171	5,273	9	944	4	337	1	60
Hillsdale	1977	122	3,194	17	1,239	7	229	7	765
	1978	141	3,679	6	460	1	176	2	607
	1979	405	9,931	4	449	3	550	1	92
	1980	159	3,125	1	75	9	231	2	72
Houghton	1977	142	3,554	5	992	4	200	3	110
	1978	131	3,424	3	52	1	192	5	48
	1979	98	2,595	4	1,209	3	108	5	5,028
	1980	311	7,594	2	283	1	65	17	1,076
Huron	1977	124	3,308	3	390	3	385	8	268
	1978	134	3,974	11	1,684	1	28	4	724
	1979	395	12,932	2	230	1	7	2	453
	1980	107	3,630	3	610	3	386	11	933

TABLE XIV-23. RESIDENTIAL, INDUSTRIAL, OFFICE, AND MERCANTILE CONSTRUCTION AUTHORIZED BY BUILDING PERMITS AND PUBLIC CONTRACTS IN MICHIGAN, BY COUNTY: 1977-1979 AND 1980 PRELIMINARY (cont.)

County	Year	Residential		Industrial[a]		Offices[b]		Mercantile[c]	
		Number of dwellings	Value ($000)	Number of buildings	Value ($000)	Number of buildings	Value ($000)	Number of buildings	Value ($000)
Ingham	1977	2,038	53,434	12	1,299	22	7,892	57	7,378
	1978	1,658	51,869	23	10,238	39	11,770	41	5,995
	1979	2,417	84,391	25	5,191	32	8,345	36	3,982
	1980	1,452	53,756	9	1,241	12	3,901	43	8,746
Ionia	1977	264	5,908	5	407	5	370	8	163
	1978	239	6,754	8	960	4	320	7	380
	1979	184	5,676	8	266	6	244	5	324
	1980	98	4,400	10	350	3	150	3	2,323
Iosco	1977	306	8,248	3	201	1	180	10	1,438
	1978	356	9,700	7	309	1	66	6	295
	1979	177	5,466	7	334	4	427	8	211
	1980	98	3,081	6	285	2	95	6	122
Iron	1977	79	2,028	1	143	1	144	8	478
	1978	63	2,015	0	0	0	0	3	675
	1979	143	4,313	1	12	0	0	0	0
	1980	31	1,179	5	167	0	0	0	0
Isabella	1977	94	2,723	4	518	2	658	5	434
	1978	453	12,844	0	0	3	312	8	824
	1979	156	6,329	2	87	3	370	7	807
	1980	130	5,147	2	42	3	94	4	723
Jackson	1977	1,177	23,223	17	1,589	7	739	25	1,366
	1978	663	19,228	18	1,835	4	891	15	2,694
	1979	771	24,232	20	4,999	15	1,867	13	721
	1980	284	9,823	8	454	6	1,069	19	2,212
Kalamazoo	1977	2,307	59,876	43	6,414	14	1,800	58	5,830
	1978	1,306	45,011	31	11,007	31	5,060	30	12,464
	1979	1,580	52,985	24	9,363	29	6,709	36	15,555
	1980	1,443	50,767	13	1,609	20	5,170	84	8,338
Kalkaska	1977	109	2,422	12	800	4	117	6	156
	1978	118	2,862	15	1,289	4	260	9	421
	1979	133	3,551	4	254	6	378	9	418
	1980	130	2,859	9	504	3	522	5	458

TABLE XIV-23. RESIDENTIAL, INDUSTRIAL, OFFICE, AND MERCANTILE CONSTRUCTION AUTHORIZED BY BUILDING PERMITS AND PUBLIC CONTRACTS IN MICHIGAN, BY COUNTY: 1977-1979 AND 1980 PRELIMINARY (cont.)

		Residential		Industrial[a]		Offices[b]		Mercantile[c]	
County	Year	Number of dwellings	Value ($000)	Number of buildings	Value ($000)	Number of buildings	Value ($000)	Number of buildings	Value ($000)
Kent	1977	3,207	83,888	94	28,327	39	8,291	56	9,512
	1978	4,197	121,147	137	49,375	52	13,991	105	18,160
	1979	2,900	110,048	151	61,568	57	16,584	101	17,404
	1980	1,847	79,019	76	41,326	37	9,914	52	7,471
Keweenaw	1977	1	29	0	0	0	0	0	0
	1978	0	0	0	0	0	0	0	0
	1979	0	0	0	0	0	0	0	0
	1980	12	343	0	0	0	0	0	0
Lake	1977	112	2,219	1	10	0	0	3	51
	1978	137	2,565	0	0	0	0	0	0
	1979	103	3,015	0	0	0	0	0	0
	1980	68	2,405	0	0	1	70	0	0
Lapeer	1977	710	21,836	9	1,363	4	330	11	690
	1978	991	31,860	7	505	8	1,064	6	604
	1979	654	24,949	4	312	8	1,310	7	100
	1980	324	12,612	1	14	8	1,006	11	803
Leelanau	1977	272	8,969	0	0	0	0	3	49
	1978	305	11,534	1	15	1	175	3	281
	1979	214	8,554	3	333	3	514	4	232
	1980	174	7,363	1	15	0	0	1	6
Lenawee	1977	408	11,897	17	927	2	163	15	989
	1978	436	14,594	14	2,985	4	311	16	3,090
	1979	325	14,322	27	4,200	9	1,648	15	1,053
	1980	190	7,343	6	875	5	2,363	13	402
Livingston	1977	1,127	44,585	15	1,835	11	1,781	24	937
	1978	1,834	77,089	24	3,164	12	980	26	2,540
	1979	1,219	60,105	32	7,668	14	3,713	19	2,192
	1980	523	28,192	18	11,862	9	1,266	14	1,507
Luce	1977	40	735	0	0	0	0	0	0
	1978	39	900	1	34	1	177	0	0
	1979	28	667	3	43	0	0	2	26
	1980	19	461	0	0	1	80	1	230

TABLE XIV-23. RESIDENTIAL, INDUSTRIAL, OFFICE, AND MERCANTILE CONSTRUCTION AUTHORIZED BY BUILDING PERMITS AND PUBLIC CONTRACTS IN MICHIGAN, BY COUNTY: 1977-1979 AND 1980 PRELIMINARY (cont.)

		Residential		Industrial[a]		Offices[b]		Mercantile[c]	
County	Year	Number of dwellings	Value ($000)	Number of buildings	Value ($000)	Number of buildings	Value ($000)	Number of buildings	Value ($000)
Mackinac	1977	13	308	1	3	0	0	2	64
	1978	22	748	2	14	0	0	0	0
	1979	30	1,124	0	0	0	0	3	220
	1980	68	1,168	2	519	1	180	0	0
Macomb	1977	5,525	196,973	129	29,465	43	5,822	84	16,537
	1978	6,792	245,810	151	62,432	45	5,535	120	27,399
	1979	4,726	173,956	137	38,746	39	7,947	109	22,913
	1980	1,914	74,829	82	26,779	29	5,455	46	11,368
Manistee	1977	180	4,221	17	145	1	85	10	173
	1978	234	5,749	6	398	2	500	4	335
	1979	144	4,247	12	1,400	2	238	2	1,508
	1980	98	2,831	6	807	2	499	2	200
Marquette	1977	1,297	30,596	14	2,206	7	1,501	20	1,333
	1978	595	16,048	7	206	8	1,034	21	1,792
	1979	284	8,628	7	269	3	237	5	330
	1980	113	3,802	3	142	3	104	4	222
Mason	1977	150	3,486	10	258	0	0	5	148
	1978	203	4,689	16	3,298	1	50	4	408
	1979	148	3,929	8	1,143	3	207	10	346
	1980	138	5,121	9	546	2	305	4	384
Mecosta	1977	183	4,705	2	175	6	217	0	0
	1978	314	8,225	2	131	5	775	4	446
	1979	146	5,131	3	2,090	1	150	2	165
	1980	144	5,941	0	0	2	225	0	0
Menominee	1977	174	4,289	11	416	1	142	1	244
	1978	193	4,892	3	130	1	239	1	130
	1979	132	3,827	2	165	1	13	1	2
	1980	195	6,322	3	219	0	0	13	124
Midland	1977	481	17,612	12	851	7	405	11	1,081
	1978	598	21,813	10	1,769	5	1,187	6	924
	1979	569	19,508	2	140	5	647	14	2,669
	1980	406	14,547	3	170	3	240	3	245

TABLE XIV-23. RESIDENTIAL, INDUSTRIAL, OFFICE, AND MERCANTILE CONSTRUCTION AUTHORIZED BY BUILDING PERMITS AND PUBLIC CONTRACTS IN MICHIGAN, BY COUNTY: 1977-1979 AND 1980 PRELIMINARY (cont.)

		Residential		Industrial[a]		Offices[b]		Mercantile[c]	
County	Year	Number of dwellings	Value ($000)	Number of buildings	Value ($000)	Number of buildings	Value ($000)	Number of buildings	Value ($000)
Missaukee	1977	132	3,049	0	0	0	0	3	40
	1978	128	3,193	2	31	0	0	6	274
	1979	92	2,458	7	144	4	518	7	800
	1980	77	2,013	2	38	2	204	3	79
Monroe	1977	885	30,143	14	3,507	9	1,089	53	1,162
	1978	651	28,005	18	8,658	6	2,007	50	2,780
	1979	597	26,776	18	34,014	7	1,130	22	3,628
	1980	240	11,830	7	2,710	4	1,147	7	489
Montcalm	1977	300	5,839	3	1,340	10	269	3	140
	1978	273	5,861	10	1,342	4	270	7	327
	1979	209	6,075	3	5,764	1	167	10	907
	1980	138	4,671	4	515	0	0	3	85
Montmorency	1977	0	0	0	0	0	0	0	0
	1978	145	5,217	2	476	0	0	8	1,172
	1979	188	6,633	1	238	1	280	3	586
	1980	70	2,974	1	264	2	679	2	312
Muskegon	1977	714	18,960	31	4,316	11	1,569	17	1,084
	1978	1,035	29,089	18	7,303	10	902	27	2,963
	1979	553	20,544	36	7,286	10	1,896	39	3,491
	1980	659	23,537	23	4,529	11	1,915	9	1,879
Newaygo	1977	188	4,009	1	4	5	93	17	597
	1978	180	4,460	1	350	2	104	8	414
	1979	185	5,260	2	150	0	0	3	169
	1980	128	3,746	2	143	2	1,584	2	140
Oakland	1977	11,199	414,079	197	51,678	107	58,748	263	48,823
	1978	10,141	448,288	235	64,114	95	39,451	169	47,527
	1979	8,168	419,599	215	82,606	94	77,547	207	63,235
	1980	4,110	228,809	126	108,789	94	83,427	105	24,065
Oceana	1977	159	3,897	5	443	2	325	9	258
	1978	138	3,851	3	494	2	205	3	36
	1979	121	4,201	3	455	3	55	6	153
	1980	145	5,113	3	562	2	97	4	88

TABLE XIV-23. RESIDENTIAL, INDUSTRIAL, OFFICE, AND MERCANTILE CONSTRUCTION AUTHORIZED BY BUILDING PERMITS AND PUBLIC CONTRACTS IN MICHIGAN, BY COUNTY: 1977-1979 AND 1980 PRELIMINARY (cont.)

		Residential		Industrial[a]		Offices[b]		Mercantile[c]	
County	Year	Number of dwellings	Value ($000)	Number of buildings	Value ($000)	Number of buildings	Value ($000)	Number of buildings	Value ($000)
Ogemaw	1977	159	4,818	8	1,065	2	208	3	548
	1978	177	6,277	1	600	2	560	4	615
	1979	156	6,230	5	483	1	125	5	433
	1980	157	5,339	0	0	3	249	2	100
Ontonagon	1977	3	74	0	0	0	0	0	0
	1978	45	770	1	25	0	0	2	38
	1979	18	394	0	0	0	0	0	0
	1980	47	1,465	2	3,700	1	300	1	10
Osceola	1977	163	2,874	1	60	1	20	5	226
	1978	129	3,107	1	225	2	328	4	401
	1979	124	3,565	5	1,749	1	15	7	227
	1980	90	2,261	4	435	3	561	2	52
Oscoda	1977	118	3,479	0	0	0	0	1	123
	1978	92	3,263	0	0	1	241	2	270
	1979	111	3,162	0	0	0	0	1	147
	1980	67	2,944	0	0	1	399	1	156
Otsego	1977	281	8,431	7	1,470	4	655	19	1,555
	1978	252	8,802	19	4,079	8	1,518	17	3,061
	1979	245	8,913	7	1,434	7	1,616	10	1,316
	1980	201	7,753	5	564	0	0	2	1,171
Ottawa	1977	1,356	39,218	49	12,416	17	1,747	29	2,830
	1978	1,635	48,205	50	9,606	20	5,129	38	2,992
	1979	1,223	44,889	54	18,533	16	3,455	34	5,795
	1980	780	29,574	34	26,846	14	4,663	12	1,856
Presque Isle	1977	114	2,736	0	0	1	150	6	339
	1978	189	3,535	0	0	0	0	0	0
	1979	193	6,567	0	0	0	0	0	0
	1980	86	3,331	1	320	1	166	0	0
Roscommon	1977	344	6,032	3	33	5	328	21	924
	1978	357	8,655	2	75	2	108	14	657
	1979	320	7,186	5	149	4	192	9	571
	1980	234	6,352	1	7	0	0	7	139

TABLE XIV-23. RESIDENTIAL, INDUSTRIAL, OFFICE, AND MERCANTILE CONSTRUCTION AUTHORIZED BY BUILDING PERMITS AND PUBLIC CONTRACTS IN MICHIGAN, BY COUNTY: 1977-1979 AND 1980 PRELIMINARY (cont.)

		Residential		Industrial[a]		Offices		Mercantile[c]	
County	Year	Number of dwellings	Value ($000)	Number of buildings	Value ($000)	Number of buildings	Value ($000)	Number of buildings	Value ($000)
Saginaw	1977	1,343	37,510	19	24,075	20	3,280	46	4,624
	1978	1,251	40,280	18	4,573	27	2,471	48	5,467
	1979	1,252	41,401	22	3,811	29	4,077	48	11,193
	1980	535	18,374	10	4,506	22	5,072	26	2,663
St. Clair	1977	745	23,192	10	1,374	9	2,102	24	1,807
	1978	783	25,847	9	4,461	8	1,758	23	1,536
	1979	641	23,605	25	7,454	13	2,093	21	1,631
	1980	650	23,186	24	8,942	10	3,170	7	1,534
St. Joseph	1977	319	8,351	22	787	1	190	9	212
	1978	438	13,534	27	8,114	8	716	15	728
	1979	465	15,520	20	1,967	9	438	13	1,909
	1980	351	9,590	16	2,662	4	176	6	775
Sanilac	1977	224	6,330	6	800	1	100	3	200
	1978	200	6,299	6	443	0	0	1	100
	1979	221	6,773	2	500	2	200	11	636
	1980	157	5,401	2	450	6	595	11	1,873
Schoolcraft	1977	77	1,379	1	112	0	0	2	181
	1978	50	1,144	0	0	0	0	0	0
	1979	36	767	1	8	1	328	0	0
	1980	41	866	0	0	1	132	0	0
Shiawassee	1977	289	9,902	5	507	5	224	6	477
	1978	306	11,113	3	170	1	16	7	746
	1979	237	8,919	10	740	2	1,500	8	853
	1980	413	12,686	4	411	1	50	0	0
Tuscola	1977	348	11,136	3	118	3	747	7	454
	1978	329	12,070	4	647	1	97	9	914
	1979	213	8,841	1	290	8	730	4	432
	1980	116	4,894	2	129	1	60	5	1,068
Van Buren	1977	333	8,955	6	197	5	4,072	20	165
	1978	368	11,529	8	592	2	521	15	1,508
	1979	258	8,226	9	403	4	1,155	11	407
	1980	205	7,320	4	908	2	500	7	966

TABLE XIV-23. RESIDENTIAL, INDUSTRIAL, OFFICE, AND MERCANTILE CONSTRUCTION AUTHORIZED BY BUILDING PERMITS AND PUBLIC CONTRACTS IN MICHIGAN, BY COUNTY: 1977-1979 AND 1980 PRELIMINARY (cont.)

		Residential		Industrial[a]		Offices[b]		Mercantile[c]	
County	Year	Number of dwellings	Value ($000)	Number buildings	Value ($000)	Number of buildings	Value ($000)	Number of buildings	Value ($000)
Washtenaw	1977	1,670	55,749	43	24,494	24	5,846	38	7,479
	1978	2,390	81,242	45	16,296	18	6,392	40	7,115
	1979	1,302	65,378	35	10,400	46	11,332	25	11,184
	1980	924	45,468	13	6,092	15	4,496	14	2,756
Wayne	1977	5,405	195,869	205	59,732	92	18,665	275	48,663
	1978	5,868	221,575	235	102,222	136	30,557	206	33,891
	1979	4,665	187,931	197	146,725	77	33,428	234	48,241
	1980	2,179	88,699	77	25,676	57	96,150	107	24,894
Wexford	1977	198	5,588	3	296	1	152	5	195
	1978	334	9,379	8	1,624	7	359	1	40
	1979	163	4,856	15	4,010	5	772	13	872
	1980	89	2,643	5	21	1	90	0	0
Michigan	1977	59,057	1,812,567	1,277	298,906	657	156,792	1,636	207,910
	1978	61,010	2,104,418	1,468	432,960	720	156,893	1,502	249,449
	1979	49,115	1,895,706	1,450	528,165	739	222,606	1,509	296,324
	1980	29,091	1,167,335	789	322,051	542	260,778	934	158,144

SOURCE: Bureau of the Census, special release.

a. Includes plants processing, producing, and assembling goods and materials together with affiliated buildings such as warehouses, garages, and administrative buildings. Newspaper and printing plants, central bakeries, laundry and dry cleaning plants, and ice plants fall within this definition.

b. Includes banks and professional buildings. Also the administration buildings of labor unions, chambers of commerce, and trade associations, and public administration buildings such as post offices, court houses, city halls, and federal offices.

c. Includes buildings used in buying, selling, distributing, and storing merchandise and materials or performing consumer services, that is, stores, auto and other showrooms, commercial warehouses, grain elevators, garages for storing commercial vehicles, restaurants, taverns, night clubs, bakery shops, laundry and dry cleaning shops, laundromats, frozen food lockers, beauty and barber shops, and animal hospitals.

XV. MANUFACTURING

The first postwar manufacturing census covered the year 1947. Subsequent surveys have been made twice each decade, with current law authorizing the U.S. Bureau of the Census to canvass the nation's industrial and business establishments at five-year intervals for years ending in 2 and 7. These economic censuses cover construction industries, manufacturing, mining, retail trade, selected transportation, and wholesale trade.

Each establishment is classified on the basis of its major economic activity. Those primarily engaged in mechanical or chemical transformation of inorganic or organic substances into new products fall in the manufacturing division, where they are further classified according to industry. The product groupings from which industry classifications are derived are based on such considerations as whether they are typically produced by the same establishment, similarity of manufacturing processes, types of materials used, types of customers, and so forth. An industry generally is defined as a group of establishments producing a single product or a more or less closely related group of products. Some activities of a service nature (for example, enameling and engraving) are included in manufacturing if they are performed for the trade, but in services or retail trade if they are performed primarily for households.

A company operating establishments at more than one location is required to submit a report for each location; also, companies engaged in distinctly different lines of activity at one location are required to submit separate reports if possible and if the activities are of significant magnitude. Establishments with less than $5,000 in value of products are excluded.

Beginning in 1949, the Census Bureau has published annual reports for intercensal years. The Annual Survey of Manufactures: 1978 is the most recent. For the 1978 Survey, any manufacturing establishment with 250 or more employees was included, companies with no establishement having 250 or more employees were sampled. The statistics on which the 1978 Survey was based were developed from about 70,000 manufacturing establishments (the national total is approximately 300,000). The statistics from these establishments were adjusted so as to represent the universe of manufacturing establishments for any industry or area.

Most of the employment statistics from the census compilations were omitted from this edition of the Abstract because they disagree with figures published by the Michigan Employment Security Commission. Census employment estimates of the number of production workers in manufacturing are averages for the four payroll periods ending nearest the 15th of March, May, August, and November. For other employees, the figure used is the mid-March total. The Michigan Employment Security Commission, in contrast, makes monthly estimates of total employment, wage, and salary, and averages the twelve figures for annual estimates.

XV. MANUFACTURING

The ranking of Michigan counties according to the relative importance of manufacturing (Table XV-18) was developed on the basis of personal income accounts and employment statistics prepared by the Bureau of Economic Analysis, U.S. Department of Commerce. Personal income is discussed in the narrative material introducing chapter VI. By and large, the BEA income and employment statistics for manufacturing are consistent with the employment figures released by the Michigan Employment Security Commission since they are based on the same monthly reports from employers.

The production of motor vehicles is of special interest because of the great importance of this industry to Michigan. The Automobile Manufacturers Association publishes a wealth of information on the industry, and *Automotive News* and Ward's Communications, Inc., in Detroit are leading sources of regional statistics about the industry. R.L. Polk & Company, also in Detroit, compiles information about new car and truck sales and registrations. Some of these data are reproduced in chapter XVI.

Current Industrial Reports, published by the Bureau of the Census, contains current information about production and shipments of a great variety of manufactured items. A few of the series give details by states.

The American Iron and Steel Institute monitors monthly steel production in the United States and Various centers. Its *Annual Statistical Report* and *Iron and Steel Works Directory for the United States and Canada* provide detailed information on the steel industry.

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TABLE XV-1. AVERAGE WAGE AND SALARY EMPLOYMENT AND WEEKLY HOURS AND EARNINGS OF PRODUCTION WORKERS IN MICHIGAN AND THE UNITED STATES MANUFACTURING ESTABLISHMENTS: 1956-1980

	Michigan				United States			
	Employment	Weekly		Hourly	Employment	Weekly		Hourly
Year	(000)	Hours	Earnings	earnings	(000)	Hours	Earnings	earnings
1956	1,199.7	40.8	94.98	2.33	17,243	40.4	78.78	1.95
1957	1,154.0	40.0	97.64	2.44	17,174	39.8	81.19	2.04
1958	1,007.4	39.5	99.70	2.52	15,945	39.2	82.32	2.10
1959	952.8	40.9	108.71	2.66	16,675	40.3	88.26	2.19
1960	967.6	40.8	112.00	2.75	16,796	39.7	89.72	2.26
1961	879.4	40.1	112.32	2.80	16,326	39.8	92.34	2.32
1962	943.7	41.8	121.43	2.91	16,853	40.4	96.56	2.39
1963	980.0	42.5	128.27	3.02	16,995	40.5	99.23	2.45
1964	1,022.8	43.5	135.11	3.11	17,274	40.7	102.97	2.53
1965	1,102.6	44.6	143.79	3.22	18,062	41.2	107.53	2.61
1966	1,169.0	43.3	145.10	3.35	19,214	41.4	112.19	2.71
1967	1,138.5	42.0	145.78	3.47	19,447	40.6	114.49	2.82
1968	1,162.0	43.3	164.15	3.79	19,781	40.7	122.51	3.01
1969	1,192.8	42.0	166.78	3.97	20,167	40.6	129.51	3.19
1970	1,081.1	40.6	168.33	4.15	19,367	39.8	133.33	3.35
1971	1,059.2	[illegible]	188.19	4.59	18,623	39.9	142.44	3.57
1972	1,097.4	42.8	211.52	4.94	19,151	40.5	154.71	3.82
1973	1,178.8	43.4	228.63	5.27	20,154	40.7	166.46	4.09
1974	1,114.0	41.2	232.03	5.63	20,077	40.0	176.80	4.42
1975	983.7	44.4	291.71	6.57	18,323	39.5	190.79	4.83
1976	1,061.7	42.7	290.97	6.81	18,997	40.1	209.32	5.22
1977	1,128.4	43.3	326.27	7.54	19,682	40.3	228.90	5.68
1978	1,179.6	43.0	349.50	8.13	20,505	40.4	249.27	6.17
1979	1,160.1	41.2	359.72	8.73	21,040	40.2	269.34	6.70
1980	1,007.2	40.2	382.26	9.51	20,300	39.7	288.62	7.27

SOURCE: Michigan Employment Security Commission Special release, and Bureau of Labor Statistics, Employment and Earnings, (Washington, D.C.: Monthly), July 1981, Tables B-1 and C-1.

TABLE XV-2. MANUFACTURING INDUSTRIES RANKED ACCORDING TO MICHIGAN'S SHARE OF UNITED STATES VALUE ADDED: 1977

Industry	Value added in Michigan as a percentage of U.S. value added		Percentage change in value added, 1972-1977	
	1972	1977	Michigan	U.S.
Photographic equipment & supplies	.1	.3	232.0	64.3
Electric Housewares & fans	.6	.5	14.3	49.5
Periodicals	.6	.7	85.6	75.0
Mobile homes	3.7	.7	(31.8)	29.7
Cheese, Natural & processed	1.0	.7	68.0	135.2
Transformers	.4	.8	178.1	53.3
Miscellaneous metal work	1.2	.8	67.4	150.8
Curtains & draperies	1.0	.8	10.4	34.1
Electronic components n.e.c.	.6	.8	156.3	80.0
Jewelry, precious metal	1.2	.9	33.0	79.5
Logging camps & contractors	1.1	1.0	82.0	112.0
Sawmills & planning mills, general	.9	1.0	67.8	49.9
Upholstered household furniture	2.0	1.0	(31.8)	29.7
Ophthalmic goods	.8	1.0	96.9	57.6
Metal Household furniture	1.3	1.1	19.3	42.5
Mining machinery	1.6	1.2	92.1	164.0
Electric coils & transformers	2.8	1.3	(37.3)	36.4
Burial caskets	2.1	1.3	(22.7)	26.2
Cut stone & stone products	5.6	1.4	13.8	26.9
Food products machinery	4.3	1.5	(40.5)	75.0
Switchgear & switchboard apparatus	1.3	1.5	104.3	66.9
Bags, except textile bags	1.0	1.6	161.7	57.9
Books	.9	1.6	213.4	65.5
Motors & generators	2.4	1.7	23.9	74.2
Surgical appliances & supplies	1.5	1.7	113.1	81.4
Aircraft equipment n.e.c.	1.2	1.7	105.0	47.1
Millwork	4.0	1.9	35.6	55.9
Sanitary food containers	7.5	2.0	(66.7)	25.0
Manufacturing Industries	1.7	2.0	109.3	65.4
Canned fruits & vegetables	3.3	2.1	5.7	59.9
Food preparations, n.e.c.	3.5	2.1	73.6	64.6
Cookies & crackers	2.0	2.2	81.9	65.4
Fabricated plate work(boiler shops)	2.2	2.2	132.3	130.5
Truck trailers	1.2	2.2	162.9	41.8
Wood household furniture	2.7	2.2	17.4	43.0
Mattresses & bedsprings	2.0	2.5	63.4	29.6
Manifold business forms	2.3	2.5	95.8	79.6
Meat packing plants	2.0	2.6	70.7	31.4
Commercial printing, letter press	4.4	2.7	.2	19.7
Optical instruments & lenses	1.4	2.7	377.3	145.0
Ice cream & frozen desserts	2.9	2.7	29.1	39.7
Converted paper products n.e.c.	1.3	2.8	397.6	132.3
Cement, hudraulic	7.4	2.8	21.9	43.8
Fabricated structural metal	3.3	2.8	21.7	45.2
Instruments to measure electricity	1.8	2.8	162.2	71.5
Wood kitchen cabinets	2.8	3.0	94.9	83.4
Truck & buss bodies	5.7	3.2	(18.7)	44.9
Ready mixed concrete	5.9	3.2	24.6	50.5
Measuring & controlling devices	3.0	3.3	129.4	105.0
Prefabricated wood buildings	2.6	3.4	111.7	65.9

TABLE XV-2. MANUFACTURING INDUSTRIES RANKED ACCORDING TO MICHIGAN'S SHARE OF UNITED STATES VALUE ADDED: 1977 (cont.)

Industry	Value added in Michigan as a percentage of U.S. value added		Percentage change in value added, 1972-1977	
	1972	1977	Michigan	U.S.
Blankbooks & looseleaf binders	3.3	3.4	91.5	86.5
Concrete products n.e.c.	4.5	3.5	.2	29.3
Woodworking machinery	1.6	3.5	145.6	123.5
Printing trades machinery	2.4	3.6	132.5	56.0
Bread, cake & related products	4.4	3.6	25.8	54.5
Pumps & pumping equipment	3.9	3.6	79.2	93.6
Secondary nonferrous metals	8.0	3.6	(12.5)	91.9
Industrial controls	3.3	3.8	105.8	78.3
Construction machinery	3.9	3.9	78.8	81.5
Spud changers, drivers & gears	4.6	3.9	66.7	96.1
Paper coating & glazing	4.8	4.0	24.7	51.8
Wood containers n.e.c.	1.8	4.1	150.0	6.4
Steel foundaries, n.e.c.	4.1	4.1	104.1	102.6
Fluid milk	3.4	4.1	48.9	23.8
Cold finishing of steel shapes	12.7	4.2	(48.0)	58.0
Signs & advertising displays	3.5	4.2	67.1	40.2
Nonferrous wire drawing & insulating	1.8	4.2	247.8	45.4
Heating equpment, except electric	4.4	4.3	29.1	31.1
Copper rolling & drawing	9.2	4.5	(34.2)	34.5
Refrigeration & hearing equipment	7.4	4.7	(18.0)	28.2
Typesetting	4.1	4.7	67.8	44.8
Watches, clocks, & watchcases	1.7	4.8	340.7	59.4
Corrugated & solid fiber boxes	4.4	4.9	71.5	55.3
Products of purchased glass	12.8	5.0	23.1	219.0
Die cut paper & board	6.9	5.1	11.1	48.8
Canvas & related products	4.1	5.2	127.8	82.0
Fabricated metal products	4.9	5.2	84.0	72.6
Wood partitions & fixtures	5.7	5.4	27.8	36.4
Adhesives & sealants	4.4	5.5	115.5	72.7
Sheet metal work	6.6	5.5	33.7	60.2
Metal doors, sash & trim	7.7	5.5	(1.0)	38.2
Folding paperboard products	3.8	5.6	120.4	51.9
Brooms & brushes	1.3	5.7	506.7	35.5
Blowers & fans	6.2	5.7	47.8	60.9
Concrete block & brick	5.6	5.9	25.7	18.3
Gaskets, Packing & sealing devices	6.3	6.1	69.9	74.6
Miscellaneous fabricated wire products	6.1	6.4	48.5	43.3
Pickles, sauces, & salad dressings	11.5	6.4	35.2	142.2
Structural wood members	6.5	6.5	79.8	80.4
Blast furnaces & steel mills	6.2	6.5	52.2	45.8
Metal partitions & fixtures	6.1	6.5	78.1	66.0

TABLE XV-2. MANUFACTURING INDUSTRIES RANKED ACCORDING TO MICHIGAN'S SHARE OF UNITED STATES VALUE ADDED: 1977 (cont.)

Industry	Value added in Michigan as a percentage of U.S. value added		Percentage change in value added, 1972-1977	
	1972	1977	Michigan	U.S.
Engineering & scientific instruments	8.7	6.7	44.0	86.5
Special industry machinery n.e.c.	4.8	6.8	83.9	29.1
Metal coating & allied services	8.4	7.6	84.0	103.7
Paints & allied products	5.5	7.7	120.8	58.8
Steel pipes & tubes	8.3	7.7	85.7	99.3
Brass, bronze & copper foundries	9.1	7.8	12.1	30.4
Wood pallets & skids	9.7	8.4	87.5	115.5
Miscellaneous publishing	11.2	8.4	21.3	61.5
Minerals, ground or treated	5.6	8.5	215.8	109.4
Architectural metal work	6.4	9.1	124.4	58.6
Machine tools, metal forming types	11.9	9.4	35.7	73.1
General industrial machinery	8.7	9.6	139.3	117.3
Aluminum foundries	8.9	9.6	89.2	75.4
Metal working machinery	11.3	9.8	78.3	106.6
Bolts, nuts, rivets, & washers	10.8	11.0	56.5	53.9
Welding apparatus, electrical	12.6	12.2	60.6	65.9
Industrial trucks & tractors	18.0	12.3	13.9	66.4
Condensed & evaporated milk	8.8	13.1	149.2	68.1
Public building & related furniture	18.1	13.4	(.2)	35.4
Industrial furnaces & ovens	8.5	13.8	186.4	75.6
Plating & polishing	12.3	14.1	78.7	54.9
Power transmission equipment	17.3	15.9	60.0	74.9
Conveyors & conveying equipment	18.1	17.0	78.0	88.9
Machine tools, metal cutting types	18.7	18.6	112.0	113.0
Metal heat treating	21.9	19.1	32.6	52.2
Gray iron foundries	23.0	20.3	60.0	81.0
Screw machine products	18.6	20.6	73.3	56.6
Nonferrous foundries, n.e.c.	22.6	21.7	27.0	32.5
Machine tool accessories	26.0	27.1	88.4	80.6
Wire springs	20.2	28.5	85.6	31.6
Office furniture	18.4	30.2	195.6	79.8
Special dies, tools, jigs, fixtures	27.3	30.6	58.2	55.3
Industrial patterns	31.7	30.8	54.6	59.3
Motor vehicles & car bodies	38.0	38.4	60.8	58.5
Motor vehicle parts & accessories	41.5	38.5	64.7	77.5
Automotive stampings	43.4	42.0	68.3	74.3

SOURCE: Deveoped from Bureau of the Census, 1977 *Census of Manufactures, Area Series, Michigan* (Washington, D.C.: 1979), MC-77-A-23, Table 5; similar document for the U.S.: and similar documents for 1972.

TABLE XV-3. ANNUAL PAYROLL, MAN-HOURS, AND WAGES OF PRODUCTION WORKERS AND VALUE ADDED IN MICHIGAN MANUFACTURING ESTABLISHMENTS, BY INDUSTRY GROUP AND INDUSTRY: 1977 AND 1978

Industry and industry group	Yearly payroll[a] ($000,000)		Production workers				Value added by manufacture[c] ($000,000)	
			Man-hours[b] (000,000)		Wages[a] ($000,000)			
	1977	1978	1977	1978	1977	1978	1977	1978
Food and kindred prod.	653.3	678.1	64.2	63.9	415.2	441.8	2,113.7	2,289.2
Meat products	94.2	100.5	11.1	11.0	69.3	74.9	216.0	271.1
Meatpacking plants	42.1	44.3	5.3	5.4	32.1	34.7	102.1	107.9
Dairy products	79.6	68.3	6.3	5.0	39.6	37.5	260.0	233.2
Fluid milk	51.6	38.5	3.3	2.4	21.5	18.3	130.9	99.0
Preserved fruits and vegetables	77.6	85.8	12.9	13.7	54.6	62.3	273.1	324.0
Canned fruits and vegetables	22.2	23.8	3.8	4.0	15.0	16.3	57.4	70.0
Pickles, sauces, salad dressings	17.6	19.7	3.2	3.4	14.4	16.2	66.4	91.7
Grain mill products	129.6	136.2	11.4	10.7	103.5	104.8	559.4	560.4
Bakery products	99.6	107.2	8.7	9.0	58.1	62.6	231.2	257.1
Bread, cake, and related products	84.6	89.6	6.8	6.9	47.0	49.7	194.0	219.7
Beverages	112.7	118.1	6.6	7.2	51.1	58.2	366.0	405.7
Bottled and canned soft drinks	60.9	61.4	3.0	3.4	19.2	22.5	173.8	203.4
Misc. foods, kindred products	26.5	27.1	3.2	3.0	15.7	16.2	78.5	94.4
Textile mill products	38.8	39.5	4.2	4.0	26.5	27.2	97.9	93.3
Apparel, other textile products	390.6	420.6	43.2	42.0	313.5	334.4	820.6	901.0
Misc. fabricated textile products	362.5	390.7	37.4	36.3	294.1	315.3	761.4	826.2
Auto. & apparel trim.	323.9	348.7	31.7	30.8	266.5	285.4	685.6	747.2

TABLE XV-3. ANNUAL PAYROLL, MAN-HOURS, AND WAGES OF PRODUCTION WORKERS AND VALUE ADDED IN MICHIGAN MANUFACTURING ESTABLISHMENTS, BY INDUSTRY GROUP AND INDUSTRY: 1977 AND 1978 (cont.)

Industry and industry group	Yearly payroll[a] ($000,000)		Production workers				Value added by manufacture[c] ($000,000)	
			Man-hours[b] (000,000)		Wages[a] ($000,000)			
	1977	1978	1977	1978	1977	1978	1977	1978
Lumber & wood pro.	152.5	178.5	23.2	25.5	10.7	127.9	303.7	368.6
Sawmills & planing mills	9.1	26.9	5.6	4.6	22.9	20.1	58.3	64.0
Millwork, plywood, struc. members	46.2	54.9	6.3	7.3	32.2	38.3	90.4	106.0
Wood containers	15.8	19.1	3.0	3.6	11.8	14.7	34.8	35.4
Misc. wood products	34.4	41.4	4.8	5.9	24.2	29.9	64.5	83.6
Furniture & fixtures	293.5	344.9	32.4	35.4	194.1	232.9	669.9	711.2
Household furniture	54.3	61.0	8.7	8.6	37.9	42.2	89.1	95.2
Wood household furniture	28.6	31.7	5.0	4.8	20.5	22.3	49.9	54.5
Office furniture	37.3	171.6	2.5	15.4	92.5	120.0	358.6	369.4
Public bldg., related furniture	31.5	33.4	3.1	3.1	17.5	19.9	53.6	63.2
Partitions and fixtures	45.4	49.3	5.4	5.5	28.5	31.2	78.3	101.6
Misc. furniture & fixtures	26.9	29.6	2.8	2.8	17.8	19.6	90.4	81.8
Paper and allied products	57.0	388.3	6.9	36.8	253.9	274.5	816.0	844.3
Papermills, exc. bldg. paper	122.4	135.7	11.9	12.0	92.5	102.1	259.4	334.9
Misc. converted paper prods.	71.8	85.3	8.3	8.7	49.6	205.5	185.0	322.5
Paper board containers and boxes	107.7	113.4	11.3	11.3	69.1	74.0	222.6	212.8
Folding paper board boxes	35.4	35.2	3.4	3.3	3.2	24.2	2.6	64.0
Corrugated and solid fiber boxes	62.7	66.9	6.5	6.5	38.0	42.2	132.2	128.4
Printing and publishing	449.8	519.0	35.5	38.8	240.8	271.9	959.9	1,104.6
Books	27.6	34.3	3.1	3.5	6.4	19.5	68.6	78.8
Book printing	20.2	25.3	2.9	3.1	15.0	17.5	38.9	44.8
Misc. publishing	30.8	30.2	2.3	2.0	14.8	16.8	105.4	83.0

TABLE XV-3. ANNUAL PAYROLL, MAN-HOURS, AND WAGES OF PRODUCTION WORKERS AND VALUE ADDED IN MICHIGAN MANUFACTURING ESTABLISHMENTS, BY INDUSTRY GROUP AND INDUSTRY: 1977 AND 1978 (cont.)

Industry and industry group	Yearly payroll[a] ($000,000)		Production workers				Value added by manufacture[c] ($000,000)	
			Man-hours[b] (000,000)		Wages[a] ($000,000)			
	1977	1978	1977	1978	1977	1978	1977	1978
Commercial printing	145.8	181.2	14.7	17.5	7.5	116.3	269.8	379.8
Commer. printing, letterpress	34.0	44.7	4.2	5.0	23.0	29.4	64.6	148.3
Commer. printing, lithographic	106.9	130.9	9.9	11.6	70.6	82.4	196.8	221.0
Chemicals & allied products	574.8	633.3	41.1	43.0	320.5	348.1	1,876.1	2,330.1
Industrial inorganic chemicals	64.4	75.9	4.6	5.3	37.0	47.4	173.1	203.4
Plastics, synthetics	66.5	72.6	4.3	4.4	35.3	39.1	175.0	201.9
Drugs	130.2	141.5	9.9	10.6	82.2	91.9	472.1	530.6
Pharmaceutical preparations	116.8	127.1	8.8	9.5	74.2	83.4	429.8	487.7
Soaps, cleaners, toilet goods	40.0	48.1	2.8	3.1	15.4	17.7	237.9	387.1
Soap & other detergents	32.4	40.8	2.1	2.5	11.6	14.1	181.8	332.4
Paints & allied products	66.7	73.4	4.7	4.6	34.5	36.3	218.4	214.0
Industrial organic chemicals	149.7	157.8	9.8	9.5	85.3	81.1	422.9	582.5
Industrial organic chemicals, NEC	141.8	149.6	9.0	8.8	79.5	75.3	401.9	559.2
Misc. chemical products	53.1	56.8	4.6	4.8	28.5	29.9	161.7	188.7
Chemical preparations, NEC	35.4	36.8	3.0	3.0	19.1	19.7	114.3	128.1
Petroleum and coal prods.	40.2	49.1	3.1	3.3	24.5	29.8	184.7	253.0
Rubber, misc. plastics products	425.2	490.7	55.4	57.5	286.6	316.12	892.0	947.4
Fabricated rubber pro., NEC	50.9	55.6	6.8	7.1	34.1	37.0	106.6	114.5
Leather & leather products	26.7	28.1	4.9	5.1	21.8	23.0	73.1	74.9

TABLE XV-3. ANNUAL PAYROLL, MAN-HOURS, AND WAGES OF PRODUCTION WORKERS AND VALUE ADDED IN MICHIGAN MANUFACTURING ESTABLISHMENTS, BY INDUSTRY GROUP AND INDUSTRY: 1977 AND 1978 (cont.)

Industry and industry group	Yearly payroll[a] ($000,000)		Production workers: Man-hours[b] (000,000)		Production workers: Wages[a] ($000,000)		Value added by manufacture[c] ($000,000)	
	1977	1978	1977	1978	1977	1978	1977	1978
Stone, clay, glass products	304.6	341.5	30.8	31.2	213.6	242.5	744.8	823.4
Products of purchased glass	50.5	54.3	5.0	5.1	34.6	37.9	105.6	115.3
Concrete, gypsum, plaster products	81.5	98.2	8.0	8.8	51.4	60.9	194.4	247.6
Misc. nonmetalic mineral products	62.7	67.1	6.9	7.0	40.4	44.2	148.0	167.7
Primary metal industries	1,548.9	1,791.2	140.3	143.5	1,192.2	1388.1	2,924.2	3,417.4
Blast furnace, basic steel products	579.8	688.1	42.6	45.2	443.3	532.2	1,138.8	1,426.0
Blast furnaces and steel mills	477.4	573.0	33.2	36.0	369.8	448.6	971.2	1,178.9
Cold finishing of steel shapes	35.8	40.4	2.9	3.3	25.1	30.2	33.1	117.7
Iron and steel foundries	660.7	753.1	60.7	60.1	520.3	592.5	1,156.2	1,222.4
Gray iron foundries	495.2	578.7	45.5	45.8	403.7	472.0	829.4	915.1
Malleable iron foundries	114.5	126.2	9.3	9.0	81.1	88.6	217.3	212.9
Steel foundries, NEC	30.8	28.3	3.5	3.3	21.9	19.7	59.2	42.3
Aluminum extruded pro.	53.5	58.9	5.7	5.9	41.4	46.7	74.4	106.5
Nonferrous wiredrawing, insulating	31.9	37.6	4.2	4.5	25.0	29.3	88.7	115.6
Nonferrous foundries	113.6	131.1	14.7	15.0	86.0	101.7	234.6	274.5
Nonferrous foundries, NEC	42.2	46.6	5.8	5.2	30.0	35.7	90.3	100.8
Fabricated metal products	2,274.3	2,480.9	235.1	240.2	1,686.4	1,849.4	4,557.0	5,036.4
Cutlery, hand tools, and hardware	304.9	316.9	28.3	28.2	222.9	230.7	643.9	662.1
Hardware, NEC	282.8	295.8	26.4	26.0	212.5	219.4	605.3	615.4

TABLE XV-3. ANNUAL PAYROLL, MAN-HOURS, AND WAGES OF PROUCTION WORKERS AND VALUE ADDED IN MICHIGAN MANUFACTURING ESTABLISHMENTS, BY INDUSTRY GROUP AND INDUSTRY: 1977 AND 1978 (cont.)

Industry and industry group	Yearly payroll[a] ($000,000)		Production workers				Value added by manufacture[c] ($000,000)	
			Man-hours[b] (000,000)		Wage[a] ($000,000)			
	1977	1978	1977	1978	1977	1978	1977	1978
Fabricated struc. metal products	206.0	223.8	20.8	21.6	131.4	145.8	408.0	428.6
Fabricated structural metal	37.1	41.7	3.6	4.0	23.0	26.6	70.1	84.7
Metal doors, sash, & trim	37.9	38.8	4.8	5.0	22.4	22.6	76.5	70.5
Fabricated platework, boiler shop	51.1	58.5	4.7	5.0	5.7	44.0	89.9	97.9
Sheet metal work	51.6	52.3	4.9	4.5	32.3	32.3	114.6	101.8
Screw machine procucts, bolts, etc.	189.2	211.5	21.0	22.2	133.4	151.0	412.0	469.0
Screw machine prods.	104.1	117.3	12.7	13.4	73.7	85.4	209.2	256.9
Bolts, nuts, rivets, washers	85.1	94.1	8.3	8.7	59.8	65.7	202.8	212.0
Metal forgings/stampings	1,180.6	1,288.3	115.7	116.8	923.7	1,016.0	2,237.7	2,533.6
Iron & steel forgings	99.0	109.9	9.0	9.2	76.1	83.1	188.6	225.6
Automotive stampings	1,031.6	1,123.9	100.3	101.1	813.7	896.0	1,947.6	2,186.6
Metal services, NEC	107.9	118.2	16.1	17.6	76.5	84.9	221.2	257.1
Plating & polishing	78.1	87.4	11.5	12.8	56.7	64.0	162.3	194.3
Metal coating, allied services	29.8	30.8	4.7	4.8	19.8	20.9	58.9	62.8
Valves & pipe fittings	73.6	89.5	7.8	9.1	47.2	58.3	160.6	196.4
Wire springs	67.2	67.5	7.9	7.3	50.6	50.8	127.9	126.7
Misc. fabricated wire pro.	26.0	26.8	3.3	3.0	18.1	19.3	46.2	42.6
Machinery, except elec.	2,439.3	2,792.2	215.0	226.4	1,583.4	1,809.7	4,961.5	5,659.0
Engines & turbines	235.5	258.8	16.2	15.9	149.9	161.5	659.5	676.2
Int. combustion engines NEC	235.0	258.4	16.2	15.9	149.6	161.3	658.5	675.4
Farm & garden machinery	100.1	107.2	8.6	8.6	69.3	75.6	239.4	245.6

TABLE XV-3. ANNUAL PAYROLL, MAN-HOURS, AND WAGES OF PRODUCTION WORKERS AND VALUE ADDED IN MICHIGAN MANUFACTURING ESTABLISHMENTS, BY INDUSTRY GROUP AND INDUSTRY: 1977 AND 1978 (cont.)

Industry and industry group	Yearly payroll[a] ($000,000)		Production workers: Man-hours[b] (000,000)		Production workers: Wages[a] ($000,000)		Value added by manufacture[c] ($000,000)	
	1977	1978	1977	1978	1977	1978	1977	1978
Const., related mach.	237.3	284.7	17.5	19.6	133.7	158.7	540.2	621.2
Construction machinery	87.1	91.5	7.6	7.3	59.0	60.0	220.4	221.2
Conveyors and conveying equipment	81.7	111.0	4.9	6.6	35.1	48.9	173.8	214.6
Industrial trucks & tractors	47.9	59.4	3.4	3.9	28.4	37.0	107.6	137.0
Metalworking machinery	978.7	1,113.5	90.7	94.5	677.6	773.1	1,802.2	2,062.9
Machine tools, metal-cutting	177.7	226.6	12.8	15.4	107.3	143.9	357.6	414.6
Machine tools, metal-forming	34.1	39.0	3.3	3.5	21.4	24.5	67.7	85.0
Special dies, tools, jigs, etc.	516.9	560.7	50.5	48.9	382.9	490.7	855.0	925.7
Machine tool accessories	205.4	236.6	19.9	22.3	137.3	162.8	428.5	528.7
Special industry mach., NEC	172.1	84.4	6.1	6.5	41.9	48.4	139.6	156.8
General industrial mach.	290.3	330.2	25.2	26.0	182.9	207.5	643.5	732.2
Pumps & pumping equip.	34.6	40.5	2.8	2.9	19.0	22.3	76.0	89.4
Power transmission equipment, NEC	64.5	75.8	5.7	6.4	44.9	54.2	150.9	169.7
General industrial mach., NEC	57.8	61.6	4.9	4.7	29.6	31.2	144.8	145.2
Office & computing mach.	197.7	113.9	5.7	5.8	39.8	46.4	123.2	154.6
Electronic computing equip.	55.1	77.2	5.5	3.3	16.9	24.3	72.0	116.7
Refrigeration and serv. machine	133.7	153.8	13.3	14.4	85.7	100.0	447.1	346.6
Refrig., heating equip.	102.7	119.7	10.4	11.3	69.9	81.6	212.7	266.2
Misc. machinery, except electrical	261.7	310.8	28.4	31.5	183.1	216.2	467.6	591.9
Carburetors, pistons, rings, etc.	84.4	91.0	7.8	8.0	61.2	67.9	136.7	161.4
Machinery, exc. elec., NEC	177.3	219.9	20.6	23.5	121.9	148.3	330.9	430.5

TABLE XV-3. ANNUAL PAYROLL, MAN-HOURS, AND WAGES OF PRODUCTION WORKERS AND VALUE ADDED IN MICHIGAN MANUFACTURING ESTABLISHMENTS, BY INDUSTRY GROUP AND INDUSTRY: 1977 AND 1978 (cont.)

Industry and industry group	Yearly payroll[a] ($000,000)		Production workers: Man-hours[b] (000,000)		Production workers: Wages[a] ($000,000)		Value added by manufacture[c] ($000,000)	
	1977	1978	1977	1978	1977	1978	1977	1978
Electrical, electronic equipment	506.9	598.6	54.3	59.1	363.6	432.7	1,059.4	1,168.1
Electrical industrial apparatus	108.3	135.9	11.3	12.7	68.6	87.9	200.9	250.2
Motors & generators	27.6	34.2	3.6	4.2	18.5	23.8	43.5	51.2
Industrial controls	31.1	39.2	2.9	3.5	17.2	21.6	59.9	90.3
Household appliances	66.3	79.4	8.5	10.0	49.9	61.7	199.9	191.7
Communication equipment	34.0	40.5	2.7	3.0	12.9	161.1	67.5	74.5
Radio & TV comm. equip.	34.0	40.5	2.7	3.0	12.9	16.1	67.5	74.5
Electric components, accessories	16.6	25.3	2.4	3.1	9.7	13.8	32.8	51.0
Misc. elec. equip, supplies	231.5	261.6	23.1	23.7	189.3	215.7	455.3	485.1
Transportation equip.	6,577.7	7,457.6	575.5	585.6	5,305.4	5,913.5	13,929.2	15,172.5
Motor vehicles/equip.	6,164.0	7,225.1	557.1	566.5	5,180.6	5,773.6	13,540.1	14,752.9
Motor vehicles and car bodies	3,061.7	3,338.3	258.6	256.9	2,462.2	2,676.5	7,198.6	7,631.1
Motor vehicles parts, accessories	3,363.7	3,232.5	293.4	30[illegible].1	2,691.3	3,059.6	6,259.8	6,996.9
Motor homes	17.3	29.6	2.3	3.6	12.1	20.8	36.7	58.7
Aircraft & parts	48.2	54.0	4.0	4.0	26.7	30.1	85.2	95.7
Aircraft equip., NEC	31.3	35.2	2.4	2.5	16.7	18.7	52.5	58.7
Ship, boat bldg., rpr.	25.5	30.6	3.9	4.1	19.1	23.2	49.7	59.4
Transportation equipment, NEC	80.8	83.7	7.0	6.7	50.8	51.7	147.0	139.9
Instruments, related prods.	153.7	174.8	15.3	15.4	90.1	99.4	332.5	357.6
Engineering, scientific instruments	48.8	55.2	4.8	5.1	34.5	39.8	85.0	93.3
Measuring, controlling devices	43.6	55.2	3.5	3.4	22.0	24.9	94.8	111.1

TABLE XV-3. ANNUAL PAYROLL, MAN-HOURS, AND WAGES OF PRODUCTION WORKERS AND VALUE ADDED IN MICHIGAN MANUFACTURING ESTABLISHMENTS, BY INDUSTRY GROUP AND INDUSTRY: 1977 AND 1978 (cont.)

Industry and industry group	Yearly payroll[a] ($000,000)		Production workers				Value added by manufacture[c] ($000,000)	
			Man-hours[b] (000,000)		Wages[a] ($000,000)			
	1977	1978	1977	1978	1977	1978	1977	1978
Medical inst., supplies	30.2	29.7	3.1	2.5	14.8	13.3	68.7	61.1
Misc. mfg. industries	126.3	127.4	15.4	14.5	77.7	77.9	254.7	252.7
Toys & sporting goods	51.6	49.0	6.7	5.7	31.7	31.3	113.1	92.7
Sporting & athletic goods, NEC	33.7	31.4	4.2	3.7	21.9	22.5	66.4	50.5
Misc. manufactures	49.5	53.0	5.6	5.6	28.3	29.3	96.6	116.1
Central admin. offices auxiliaries[d]	2,620.2	2,358.5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
MICHIGAN	20,054.0	22,892.8	1,626.3	1,671.5	12,720.6	14,240.9	37,566.0	41,804.6

SOURCE: Bureau of the Census, *1977 Census of Manufactures, Geographic Area series, Michigan* (Washington, D.C.: 1979), MC77-A-23(P), Table 3 and *Statistics for States, Standard Metropolitan Statistical Areas, Large Industrial Counties, and Selected Cities* (Washington, D.C.: 1981).

a. Includes all forms of cash compensation before deduction for Social Security, income tax, and so forth. Does not include supplements; see Table XV-4 for employer contributions to fringe benefits for 1969.
b. Man-hours worked or paid for at the plant, including actual overtime hours. Excludes hours paid for vacations, or sick leave, when employee was not at plant.
c. Adjusted value added is derived by subtracting the cost of raw materials, parts, components, supplies, fuels goods purchased for resale, and contract work from the value of shipments (including resales) and adjusting for the net change in finished goods and work in process inventories during the year. An exception is the pickles, sauces, and salad dressings industry, in which establihsments reported value of production instead of value of shipments. For the industry, the formula was modified to exclude any change in finished products inventories between the beginning and end of the year.
d. Administrative employees include those involved in general company policy determination, planning, and management. Auxiliary employees are those concerned with storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories.
n.a.: not applicable.
NEC.: not elsewhere classified.

TABLE XV-4. ANNUAL PAYROLL AND VALUE ADDED IN MICHIGAN AND UNITED STATES MANUFACTURING ESTABLISHMENTS, SELECTED YEARS: 1949-1978

(Millions of dollars)

	Yearly payroll[a]		Value added by manufacture[b]	
Year	Michigan	United States[c]	Michigan	United States[c]
1949	3,479.7	41,482.0	5,770.0	75,366.5
1950	4,144.4	46,642.8	7,392.3	89,749.8
1951	4,604.5	54,741.5	7,858.4	102,085.8
1952	4,933.0	59,598.2	8,320.7	109,162.1
1953	5,919.4	66,492.9	9,781.6	121,659.1
1954	5,248.9	62,962.7	8,707.2	117,032.3
1955	6,083.5	69,096.6	10,690.5	135,022.5
1956	5,827.5	74,015.1	10,201.5	144,909.3
1957	5,835.5	76,314.6	10,375.4	147,838.4
1958	5,161.2	73,875.2	8,363.6	141,540.6
1959	5,855.1	81,203.6	10,534.8	161,535.8
1960	6,106.8	83,672.5	10,858.2	163,998.5
1961	5,678.2	83,677.4	10,191.7	164,281.1
1962	6,281.0	89,819.2	11,969.3	179,071.1
1963	6,950.7	99,898.8	13,090.3	192,082.9
1964	7,604.9	106,048.1	14,358.6	206,193.6
1965	8,586.1	113,972.2	16,885.6	226,939.9
1966	9,221.3	125,350.0	17,629.2	250,880.1
1967	9,357.2	132,208.4	17,241.6	261,983.8
1968	10,350.4	141,822.7	19,266.4	285,058.9
1969	11,041.6	152,765.0	20,253.0	304,440.7
1970	10,232.5	153,078.5	17,959.4	300,227.6
1971	11,128.6	156,202.8	20,270.6	314,138.4
1972	12,741.4	174,205.5	23,375.7	353,994.0
1973	14,768.3	193,324.5	27,170.4	405,583.6
1974	14,807.5	208,367.3	26,330.2	452,477.6
1975	14,100.4	209,519.0	25,084.0	442,485.2
1976	17,322.2	233,388.7	32,389.8	511,471.1
1977	20,072.4	263,020.6	37,480.4	581,640.9
1978	22,892.8	299,142.6	41,804.6	657,245.8

SOURCE: Bureau of the Census, 1978 Annual Survey of Manufactures (Washington, D.C.: 1981), M78(AS)-6; Bureau of the Census, 1977 Census of Manufactures, Geographic Area Series, Michigan (Washington, D.C.: 1979), MC77-A-23(P), Table 1; 1977 Census of Manufactures, Summary Series, Selected Statistics for Industry Groups and Industries: 1977 and 1972 (Washington, D.C.: 1979), MC77-S-1(P), Table 1; and similar documents for previous years.

a. Includes all forms of cash compensation before deductions for Social Security, income tax, and so forth. Does not include supplements. Includes central administrative offices, auxiliaries, and factories.

b. Adjusted value added for 1956-1967; unadjusted value added for previous years. Unadjusted value added is derived by subtracting the cost of raw materials, parts, components, supplies, fuels, goods purchased for resale, and contract work from the value of shipments (including resales). Adjusted value added takes into account the net change in finished goods and work-in-process inventories during the year. The concept of value added is not applied to central administrative offices and auxiliaries.

c. Excludes Alaska and Hawaii prior to 1958.

TABLE XV-5. MANUFACTURERS' EXPENDITURES FOR NEW PLANT AND NEW EQUIPMENT IN MICHIGAN AND THE UNITED STATES: 1955-1978

(Millions of dollars)

	Michigan			United States[a]		
Year	New structures and additions to plant	New machinery and equipment	Total	New structures and additions to plant	New machinery and equipment	Total
1955	197	609	806	2,426	5,808	8,233
1956	232	783	1,015	3,472	7,762	11,233
1957	129	566	695	3,865	8,279	12,144
1958	111	354	465	3,235	6,308	9,544
1959	102	430	531	2,582	6,558	9,140
1960	134	522	656	2,818	7,279	10,098
1961	110	453	563	2,749	7,031	9,780
1962	115	441	556	2,731	7,705	10,436
1963	171	591	762	2,966	8,404	11,370
1964	224	807	1,031	3,269	10,025	13,294
1965	n.a.	n.a.	1,453	4,186	12,429	16,615
1966	n.a.	n.a.	1,489	5,230	15,006	20,236
1967	336	1,024	1,360	5,714	15,789	21,503
1968	n.a.	n.a.	1,170	5,294	15,319	20,613
1969	n.a.	n.a.	1,372	5,806	16,485	22,291
1970	n.a.	n.a.	1,301	5,756	16,409	22,164
1971	n.a.	n.a.	1,202	5,342	15,599	20,941
1972	n.a.	n.a.	2,071	5,370	18,707	24,073
1973	n.a.	n.a.	1,998	6,016	20,958	26,973
1974	326	2,524	2,851	8,209	27,337	35,546
1975	307	1,956	2,263	n.a.	n.a.	37,262
1976	301	2,335	2,636	n.a.	n.a.	40,545
1977	475	3,364	3,839	8,606	40,036	48,641
1978	626	4,117	4,743	10,186	44,659	55,244

SOURCE: Bureau of the Census, 1978 Annual Survey of Manufactures (Washington, D.C.: 1981), M78(AS)-6: 1977 Census of Manufacturers, (Washington,D.C: 1981) MC77-SR-1; Bureau of the Census, 1977 Census of Manufactures, Geographic Area Series, Michigan (Washington, D.C.: 1979), MC77-A-23(P), Table 1; 1977 Census of Manufacturers, Summary Series, Selected Statistics for Industry Groups and Industries: 1977 and 1972 (Washington, D.C.: 1979), MC77-S-1(P), Table 1; and similar documents for previous years.

a. Excludes Alaska and Hawaii prior to 1958.

n.a.: not available.

TABLE XV-6. ANNUAL MAN-HOURS AND WAGES OF PRODUCTION WORKERS IN MICHIGAN AND U.S. MANUFACTURING ESTABLISHMENTS, SELECTED YEARS: 1950-1978

	Man-hours[a] (millions)		Wages[b] (millions of dollars)	
Year	Michigan	United States[c]	Michigan	United States[c]
1950	1,769.2	23,716.5	3,112.9	34,600.0
1951	1,761.2	25,263.8	3,397.4	40,654.8
1952	1,729.5	25,617.6	3,587.3	43,763.6
1953	1,987.3	27,065.6	4,327.1	48,979.1
1954	1,650.3	24,334.1	3,661.0	44,590.5
1955	1,912.4	25,898.3	4,365.1	49,217.9
1956	1,686.3	26,088.5	4,018.6	52,040.8
1957	1,592.6	25,208.0	3,946.7	52,569.0
1958	1,204.1	22,679.2	3,184.8	49,605.2
1959	1,388.1	24,443.6	3,769.7	54,714.1
1960	1,412.5	24,174.4	3,977.4	55,555.5
1961	1,256.4	23,289.4	3,597.8	54,764.6
1962	1,400.9	24,269.5	4,124.6	59,134.1
1963	1,473.9	24,509.4	4,521.0	62,090.8
1964	1,564.6	24,510.3	4,948.8	65,838.9
1965	1,721.7	26,567.8	5,698.9	71,361.5
1966	1,775.7	28,102.5	6,066.7	78,256.4
1967	1,669.2	27,837.6	6,008.0	81,393.6
1968	1,744.3	28,156.8	6,777.4	87,480.4
1969	1,743.1	28,599.8	7,154.9	93,459.6
1970	1,468.1	26,669.3	6,332.4	91,609.0
1971	1,463.5	25,265.9	6,965.4	93,231.3
1972	1,582.6	26,699.2	8,094.2	105,501.8
1973	1,736.4	28,096.9	9,545.3	118,332.6
1974	1,532.6	27,239.3	9,101.2	124,983.2
1975	1,308.4	24,069.6	8,512.1	121,429.0
1976	1,503.2	25,354.2	10,792.9	137,565.4
1977	1,632.3	26,546.7	12,732.2	156,440.5
1978	1,671.5	27,681.8	14,240.9	176,446.6

SOURCE: Bureau of the Census, *1978 Annual Survey of Manufacturers* (Washington, D.C.: 1981), M78(AS)-6; Bureau of the Census, *1977 Census of Manufacturers, Georgraphic Area Series, Michigan* (Washington, D.C.: 1979), MC77-A-23(P), Table 1; *1977 Census of Manufactuers, Summary Series, Selected Statistics for Industry Groups and Industries: 1977 and 1972* (Washington, D.C.: 1979), MC77-S-1-(P), Table 1; and similar documents for previous years.

a. Man-hours worked or paid for at the plant, including actual overtime hours. Excludes hours paid for vacations, holidays, or sick leave, when the employee was not at the plant. Data not available for Michigan prior to 1950.
b. Includes all forms of compensation before deductions for Social Security, income tax, and so forth.
c. Excludes Alaska and Hawaii prior to 1958.

TABLE XV-7. RANKING OF STATES ACCORDING TO PERCENTAGE CHANGE IN VALUE ADDED IN MANUFACTURING: 1972-1977

State	Percentage change in value-added 1972-1977	State	Percentage change in value-added 1972-1977	State	Percentage change in value-added 1972-1977
Delaware	25.2	North Carolina	64.4	Washington	82.8
New Jersey	41.4	Alabama	64.8	Iowa	83.2
New York	46.9	Tennessee	64.9	Utah	84.5
West Virginia	47.4	Kentucky	66.1	Kansas	84.7
Maryland	51.0	New Hampshire	69.1	Montana	86.0
Pennsylvania	53.0	Georgia	69.2	Hawaii	92.9
Illinois	55.8	Maine	69.6	Mississippi	98.2
Rhode Island	56.7	Idaho	72.8	Oklahoma	104.9
Missouri	56.9	Arkansas	73.8	South Dakota	113.9
Massachusetts	58.2	Virginia	74.3	Texas	115.8
Ohio	59.3	Minnesota	77.5	New Mexico	120.7
Indiana	60.1	Wisconsin	77.5	Louisiana	122.4
Michigan	60.7	California	77.8	North Dakota	136.5
Connecticut	61.1	Oregon	79.3	Nevada	139.7
Florida	61.3	Arizona	80.2	Wyoming	164.6
Dist. of Columbia	62.8	Colorado	81.8	Alaska	181.3
Nebraska	62.8	Vermont	82.3		
South Carolina	63.1			United States	65.5

SOURCE: Bureau of the Census, 1977 Census of Manufactures, Geographic Area Series, Michigan (Washington, D.C.: 1979), MC77-A-23, Table 1; and similar documents for other states, the District of Columbia, and the U.S.: and for 1972.

TABLE XV-8. RANKING OF STATES ACCORDING TO VALUE ADDED PER ESTABLISHMENT: 1977

State	Value-added per establishment 1977	State	Value-added per establishment 1977	State	Value-added per establishment 1977
New Mexico	.60	Arizona	1.17	North Carolina	1.82
Nevada	.68	New Hampshire	1.19	Texas	1.82
Montana	.73	California	1.22	Pennsylvania	1.92
Florida	.75	New York	1.22	South Carolina	1.92
Wyoming	.75	Oklahoma	1.22	Wisconsin	1.93
South Dakota	.82	Washington	1.29	Tennessee	1.94
North Dakota	.83	Arkansas	1.35	Virginia	1.96
Hawaii	.84	Minnesota	1.39	Illinois	2.06
Rhode Island	.89	Nebraska	1.43	West Virginia	2.10
Idaho	.95	Georgia	1.45	Alabama	2.16
Vermont	1.02	New Jersey	1.47	Louisiana	2.24
Maine	1.09	Massachusetts	1.50	Iowa	2.30
Oregon	1.09	Kansas	1.65	Michigan	2.40
Dist. of Columbia	1.10	Connecticut	1.70	Ohio	2.49
Alaska	1.11	Mississippi	1.71	Delaware	2.60
Utah	1.12	Missouri	1.74	Kentucky	2.66
Colorado	1.15	Maryland	1.81	Indiana	2.79
				United States	1.63

SOURCE: Bureau of the Census, 1977 Census of Manufactures, Geographic Area Series, Michigan (Washington, D.C.: 1979), MC77-A-23, Table 1; and similar documents for other states, the District of Columbia, and the United States.

TABLE XV-9. EARNINGS IN MANUFACTURING ESTABLISHMENTS LOCATED IN MICHIGAN, AND THE UNITED STATES BY MAJOR INDUSTRY GROUP: 1975 AND 1980

(In thousands of dollars)

Industry group		1975[a]	1980[a]
Food & kindred products	Michigan	608,642	887,398
	U.S.	17,821,000	27,059,000
Textile mill products	Michigan	D	D
	U.S.	6,959,000	10,208,000
Apparel & other fabricated textile products	Michigan	220,419	340,632
	U.S.	8,265,000	12,115,000
Paper & allied products	Michigan	284,461	412,816
	U.S.	7,921,000	13,352,000
Printing, publishing, & allied industries	Michigan	365,598	545,251
	U.S.	11,952,000	19,476,000
Chemicals & allied products	Michigan	679,077	1,038,672
	U.S.	14,484,000	24,088,000
Petroleum refining & related industries	Michigan	43,275	64,533
	U.S.	3,103,000	5,309,000
Tobacco manufacturing	Michigan	D	D
	U.S.	769,000	1,251,000
Rubber & miscellaneous plastic products	Michigan	246,263	505,565
	U.S.	6,221,000	11,185,000
Leather and leather products	Michigan	30,658	D
	U.S.	1,761,000	2,461,000
Total nondurable goods	Michigan	2,512,857	3,875,484
	U.S.	79,256,000	126,504,000
Lumber & wood products excl. furniture	Michigan	108,365	142,531
	U.S.	5,728,000	9,671,000
Furniture & fixtures	Michigan	214,592	414,956
	U.S.	3,569,000	5,825,000
Primary metal industries	Michigan	1,230,027	1,718,288
	U.S.	16,195,000	25,838,000
Fabricated metal products	Michigan	1,529,682	2,297,658
	U.S.	17,408,000	28,407,000
Machinery, except electrical	Michigan	1,941,305	3,624,455
	U.S.	26,645,000	48,647,000
Electrical machinery	Michigan	461,253	961,640
	U.S.	19,877,000	36,546,000
Transportation equipment excl. motor vehicle	Michigan	145,891	283,044
	U.S.	13,016,000	24,186,000
Motor vehicles & equipment	Michigan	5,541,863	8,698,980
	U.S.	11,841,000	18,582,000
Ordnance	Michigan	--	--
	U.S.	--	--
Stone, glass, and clay	Michigan	264,897	393,328
	U.S.	7,212,000	11,609,000
Instruments	Michigan	115,508	223,291
	U.S.	6,591,000	12,665,000
Miscellaneous manufacturing	Michigan	90,212	137,858
	U.S.	3,707,000	5,617,000
Total durable goods	Michigan	11,643,595	18,896,029
	U.S.	131,789,000	227,593,000
TOTAL manufacturing	Michigan	14,156,452	22,771,513
	U.S.	211,045,000	354,097,000

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

D: Not shown to avoid disclosure of confidential information.

a: Estimates based on 1972 Standard Industrial Classification. Estimates have been revised to reflect the 1980 Comprehensive NIPA Revisions.

TABLE XV-10. HOURS AND EARNINGS FOR PRODUCTION WORKERS IN MANUFACTURING, SELECTED MICHIGAN LABOR MARKET AREAS: 1978-1980

Area	Average weekly earnings			Average weekly hours			Average hourly earnings		
	1978	1979	1980	1978	1979	1980	1978	1979	1980
Ann Arbor	$390.05	$390.59	$401.36	44.4	42.4	40.0	$ 8.79	$ 9.21	$ 10.03
Battle Creek	336.99	352.72	376.6	41.8	40.9	40.4	8.06	8.62	9.32
Bay City	330.21	319.15	349.00	43.3	41.4	40.7	7.63	7.71	8.58
Benton Harbor	272.16	284.98	307.89	41.5	40.7	39.8	6.56	7.00	7.74
Detroit	381.23	393.47	417.04	43.5	42.3	41.1	8.78	9.30	10.15
Flint	410.57	405.63	443.44	45.7	41.8	41.2	8.98	9.70	10.76
Grand Rapids	273.90	294.68	316.41	41.4	40.5	39.9	6.62	7.28	7.93
Jackson	308.04	323.48	354.52	43.3	42.0	42.1	7.11	7.70	8.42
Kalamazoo-Portage	297.37	321.76	344.88	41.0	40.2	40.0	7.25	8.00	8.62
Lansing-East Lansing	357.56	372.41	384.45	42.1	40.3	38.0	8.49	9.24	10.12
Muskegon-Muskegon Heights-Norton Shores	292.49	305.68	333.06	41.5	40.3	40.2	7.05	7.59	8.29
Saginaw	418.84	404.66	425.77	45.3	41.3	39.5	9.25	9.80	10.78
Upper Peninsula	224.32	248.38	262.21	40.2	40.4	39.8	5.58	6.15	6.67
Michigan	349.50	359.72	382.26	43.0	41.2	40.2	8.13	8.73	9.51

SOURCE: Michigan Employment Security Commission, special release.

NOTE: Dollar figures include cash earnings, before payroll deductions, and exclude fringe benefits such as company paid health and welfare premiums and employer contributions to Social Security Trust Funds.

TABLE XV-11. HOURS AND EARNINGS OF PRODUCTION WORKERS IN MICHIGAN AND THE UNITED STATES, BY INDUSTRY GROUP: 1980

	Michigan			United States		
Industry group	Average weekly hours	Average hourly earnings	Average weekly earnings	Average weekly hours	Average hourly earnings	Average weekly earnings
Durable goods	40.2	$ 9.86	$ 396.25	40.2	$ 7.76	$ 311.95
Lumber and wood products	38.0	5.93	225.23	38.6	6.56	253.22
Furniture and fixtures	39.5	6.79	268.09	38.1	5.48	208.79
Primary metal products	39.4	10.67	420.20	40.1	9.76	319.38
Fabricated metal products	39.3	9.17	360.42	40.4	7.44	300.58
Nonelectrical machinery	42.0	9.60	403.07	41.1	8.04	330.44
Electrical machinery	40.8	7.90	322.32	39.8	6.98	277.01
Transportation equipment	40.1	10.93	438.45	40.6	9.34	379.20
Motor vehicle and equipment	40.0	11.02	440.60	39.9	9.89	394.61
Nondurable goods	40.3	8.05	324.37	39.0	6.54	255.06
Food and kindred products	41.6	8.01	333.30	39.7	6.86	272.34
Textile mill products & apparel	38.4	8.99	345.37	38.2	6.70	182.30
Paper and allied products	43.0	8.19	352.21	42.3	7.85	332.06
Printing, publishing, and allied industries	36.1	8.23	298.98	37.1	7.54	279.73
Chemicals and allied products	42.2	8.83	372.54	41.5	8.29	344.04
TOTAL	40.2	9.51	382.26	39.7	7.27	288.62

SOURCE: Bureau of Labor Statistics, Employment and Earnings (Washington, D.C.: March 1981), vol. 28, no. 3, Table C-2; and Michigan Employment Security Commission, special release.

TABLE XV-12. WEEKLY HOURS OF MANUFACTURING PRODUCTION WORKERS IN MICHIGAN, MONTHLY: 1956-1981

Year	January	February	March	April	May	June	July	August	September	October	November	December
1956	40.8	39.6	40.8	40.7	39.4	39.6	40.6	40.6	41.3	41.7	41.5	43.4
1957	41.0	40.7	40.4	39.6	39.7	39.9	39.5	40.3	40.1	39.6	40.1	39.6
1958	38.5	38.2	39.2	39.1	39.0	39.4	39.1	39.7	40.2	39.3	40.1	41.6
1959	40.8	40.0	41.0	41.5	41.6	41.5	40.8	40.4	40.8	40.7	39.3	41.4
1960	42.9	41.9	41.0	39.2	40.7	40.9	40.5	40.0	40.6	40.9	40.3	40.2
1961	38.8	39.0	39.3	40.0	40.4	40.5	40.5	39.7	36.3	41.0	42.2	42.7
1962	41.3	41.0	41.5	41.5	42.0	41.9	41.5	40.8	42.3	42.4	42.3	43.2
1963	42.2	41.9	41.8	41.4	42.4	42.6	42.4	41.4	42.6	43.3	43.4	44.4
1964	43.0	43.0	42.7	43.4	43.5	43.8	43.9	43.4	44.2	42.9	43.6	45.7
1965	45.4	44.7	45.6	44.2	44.8	44.8	44.1	42.5	43.5	44.7	45.4	45.3
1966	44.3	44.1	43.5	43.5	42.7	42.8	42.6	43.0	43.6	43.6	43.4	43.0
1967	42.0	41.2	40.7	41.0	42.0	41.9	41.6	42.6	43.7	43.3	40.9	43.3
1968	42.0	42.1	42.9	41.8	44.1	43.7	42.9	42.3	44.0	44.3	44.6	43.6
1969	42.6	42.0	41.8	41.7	41.7	42.1	42.0	41.3	42.8	42.3	41.3	42.9
1970	40.8	39.6	40.5	40.2	41.1	42.6	41.1	40.4	39.4	40.0	40.2	41.0
1971	41.7	41.6	41.0	39.4	41.3	41.9	40.0	40.1	38.7	41.4	41.4	43.4
1972	41.3	41.6	41.9	43.3	42.5	42.9	42.5	42.1	43.4	43.3	43.7	45.2
1973	43.7	44.1	43.4	44.6	43.8	44.0	43.4	41.9	43.0	43.1	42.1	43.5
1974	40.9	40.8	41.2	38.6	41.8	41.9	41.8	41.5	42.2	42.2	40.2	41.8
1975	39.8	39.5	39.4	39.8	39.7	40.3	40.7	40.8	41.6	41.0	41.1	44.4
1976	41.3	42.2	42.6	40.7	43.1	43.7	43.2	42.6	43.0	42.0	43.7	44.1
1977	42.2	42.0	43.2	43.2	43.6	44.1	43.5	42.5	43.5	43.2	43.4	45.2
1978	41.8	41.6	42.5	42.8	42.6	42.9	42.9	42.5	43.4	43.5	43.6	45.9
1979	42.5	42.9	43.1	37.3	42.2	41.8	42.1	40.5	40.5	41.0	39.2	42.0
1980	40.0	39.9	40.3	39.7	39.5	39.5	39.6	39.6	40.1	41.0	40.9	42.4
1981	41.1	39.1	41.1	40.9	41.7	41.7	40.3	40.6	38.6	40.3	39.6	

SOURCE: Michigan Employment Security Commission, special release.

TABLE XV-13. WEEKLY EARNINGS OF MANUFACTURING PRODUCTION WORKERS IN MICHIGAN, MONTHLY: 1956-1981

Year	January	February	March	April	May	June	July	August	September	October	November	December
1956	92.29	89.65	92.41	92.59	89.79	91.20	93.83	94.35	99.16	100.12	100.02	106.03
1957	98.36	97.42	97.16	94.84	95.64	98.56	96.97	98.56	100.25	98.45	100.25	98.17
1958	94.98	94.55	97.92	97.55	97.15	98.66	97.52	99.61	101.63	98.09	105.30	110.82
1959	106.41	104.48	107.83	109.39	110.16	110.18	107.88	108.15	111.10	109.16	103.91	112.90
1960	118.75	115.31	112.18	106.39	111.23	111.90	110.77	108.92	111.97	113.13	110.66	111.03
1961	106.54	107.17	108.51	111.72	112.88	113.32	113.76	110.33	100.37	114.76	121.54	123.74
1962	118.70	117.47	119.40	119.69	121.46	119.60	117.22	123.85	124.10	125.88	125.88	129.17
1963	124.95	124.44	124.58	123.08	126.90	127.28	126.86	120.93	129.63	132.93	125.19	138.31
1964	132.78	132.57	131.69	134.80	135.37	136.31	132.78	135.10	138.92	129.56	135.51	145.46
1965	144.92	142.82	147.06	142.19	143.76	143.49	140.72	133.92	141.05	145.41	149.41	149.49
1966	145.61	144.96	143.81	144.68	141.38	142.44	141.73	143.06	149.16	149.37	148.47	147.62
1967	143.64	140.20	138.10	140.59	144.90	145.43	145.02	148.67	152.73	150.86	143.85	156.18
1968	159.66	155.22	159.85	157.00	167.01	165.19	161.78	159.09	168.65	170.51	172.69	171.65
1969	167.25	161.87	161.68	163.46	163.26	166.08	169.18	164.75	171.93	169.24	166.85	177.26
1970	167.85	160.97	166.25	165.26	171.02	178.54	170.28	167.09	165.83	161.64	162.97	179.58
1971	187.76	188.78	186.71	179.88	189.07	192.45	182.24	182.21	178.33	190.69	190.69	208. 6
1972	199.36	201.43	204.22	206.76	207.95	209.09	214.03	206.29	215.26	215.24	219.64	234.09
1973	225.67	228.97	223.55	232.95	228.07	230.43	227.24	218.13	226.44	228.30	223.34	235.86
1974	220.53	220.52	223.96	206.93	231.70	235.44	235.63	234.89	244.68	248.98	234.65	247.33
1975	230.80	229.37	233.05	237.17	238.08	245.19	249.78	252.51	261.62	261.79	262.96	291.71
1976	270.80	278.94	284.99	267.03	292.61	298.56	292.64	290.70	299.28	289.29	302.93	323.83
1977	308.48	302.02	218.20	218.21	322.99	330.66	327.34	318.33	331.43	338.39	339.78	356.85
1978	326.92	323.23	336.33	340.52	340.03	344.23	345.86	340.26	361.00	367.92	371.25	394.24
1979	363.89	369.71	374.54	320.15	369.50	363.74	361.51	348.75	354.80	365.15	347.82	380.77
1980	361.88	364.21	375.76	366.91	361.50	369.29	373.43	371.61	386.40	407.87	408.63	433.33
1981	417.41	395.38	420.58	418.24	434.93	439.91	421.94	423.54	410.96	435.95	429.12	

SOURCE: Michigan Employment Security Commission, special release.

TABLE XV-15. LABOR TURNOVER RATES IN MANUFACTURING IN MICHIGAN AND THE UNITED STATES, BY INDUSTRY GROUP: 1980

Industry group	Accessions			Separations		
	New hires	Recalls	Total	Quits	Layoffs	Total
			Michigan			
Furniture and fixtures	1.2	1.2	2.5	0.9	1.1	2.6
Primary metals	0.2	2.8	3.7	0.3	3.1	4.2
Fabricated metals	1.2	2.3	4.5	0.6	3.6	5.0
Nonelectrical machinery	1.0	1.0	2.3	0.6	1.5	2.8
Electrical machinery	0.8	3.1	4.4	0.7	3.9	5.5
Transportation equipment	0.8	1.0	3.4	0.4	3.0	4.2
Motor vehicles only	0.8	1.0	3.4	0.4	3.0	4.2
Total, durable goods	0.9	1.5	3.3	0.5	2.7	4.0
Food and kindred products	1.5	2.5	3.9	1.0	3.3	5.0
Textile mill products and apparel	1.3	4.5	7.5	0.7	4.8	6.1
Paper and allied products	0.8	1.2	2.4	0.5	1.9	3.2
Chemicals, petroleum, and related products	0.7	0.4	1.3	0.6	0.6	1.7
Total, nondurable goods	1.0	1.6	2.9	0.7	2.0	3.2
TOTAL	0.9	1.5	3.2	0.6	2.6	3.8
			United States			
Furniture and fixtures	2.8	.9	3.9	2.1	1.5	4.5
Primary metals	.9	1.8	3.0	0.6	2.6	3.8
Fabricated metals	2.0	1.3	3.5	1.4	2.1	4.3
Nonelectrical machinery	1.6	0.5	2.4	1.0	1.1	2.8
Electrical machinery	1.7	0.6	2.7	1.2	1.1	3.2
Transportation equipment	1.4	1.5	3.4	0.8	2.5	4.2
Motor vehicles only	0.6	2.3	3.9	0.6	4.5	6.0
Total, durable goods	1.8	1.1	3.1	1.2	1.8	3.8
Food and kindred products	3.8	2.0	6.0	2.5	2.8	6.2
Textile mill products and apparel	3.0	1.2	4.5	2.5	1.6	4.9
Paper and allied products	1.5	0.8	2.5	1.0	1.2	2.9
Chemicals, petroleum, and related products	1.5	0.3	1.9	0.7	0.7	2.0
Total, nondurable goods	2.7	1.1	4.0	1.9	1.6	4.3
TOTAL	2.1	1.1	3.5	1.5	1.7	4.0

SOURCE: Michigan Employment Security Commission, special release; and Bureau of Labor Statistics, Employment and Earnings, vol. 28, no.3 (Washington, D.C.: March 1981), Table D-2.

TABLE XV-16. ANNUAL PAYROLL, HOURS, AND WAGES OF PRODUCTION WORKERS, AND VALUE ADDED IN MANUFACTURING ESTABLISHMENTS IN STANDARD METROPOLITAN STATISTICAL AREAS AND SELECTED COUNTIES: 1972, 1977, AND 1978.

		Yearly	Production workers		
Area	Year	payroll[a] ($000,000)	Hours[b] (000,000)	Wages[a] ($000,000)	Value added by manufacture[c]
Standard Metropolitan Statistical Area					
Ann Arbor	1972	450.0	56.8	316.2	907.0
	1977	814.1	65.9	565.4	1,503.7
	1978	957.5	68.6	653.2	1,535.8
Battle Creek	1972	267.1	37.9	183.4	695.7
	1977	381.6	32.5	258.9	1,025.5
	1978	424.1	32.9	284.1	1,120.2
Bay City	1972	100.9	15.2	72.8	201.7
	1977	168.0	16.3	124.2	346.4
	1978	198.4	16.4	140.0	399.3
Detroit	1972	7,175.6	773.9	4,190.1	11,792.2
	1977	10,946.4	768.2	6,262.5	18,118.8
	1978	12,621.1	777.3	6,982.8	19,926.3
Grand Rapids	1972	712.8	114.5	485.6	1,514.4
	1977	1,162.9	123.3	786.8	2,581.5
	1978	1,341.0	133.1	909.8	3,009.0
Jackson	1972	173.9	26.4	120.2	377.9
	1977	254.6	25.0	166.2	551.2
	1978	287.9	26.4	187.5	624.7
Kalamazoo-Portage	1972	335.4	45.7	205.9	755.0
	1977	554.4	46.8	336.6	1,137.6
	1978	608.9	47.5	368.5	1,353.3
Lansing-East Lansing	1972	504.3	70.4	378.6	981.4
	1977	782.1	72.4	599.0	1,438.2
	1978	870.3	74.1	662.5	1,747.3
Musekegon-Norton Shores Muskegon Heights	1972	226.4	32.8	154.4	401.6
	1977	374.9	32.2	277.6	673.0
	1978	395.5	36.7	266.3	926.4
Saginaw	1972	425.9	55.9	323.0	921.1
	1977	708.7	59.5	548.5	1,461.5
	1978	794.8	61.3	618.4	1,614.2
Toledo, Ohio-Mich.	1972	986.9	128.9	625.6	1,878.9
	1977	1,480.3	128.7	964.3	3,215.9
	1978	1,692.8	130.3	1,074.3	3,411.4
Portion in Ohio	1972	885.1	115.0	556.8	1,689.6
	1977	1,341.1	114.0	850.9	2,885.7
Portion in Mich.	1972	101.8	13.8	68.9	189.3
	1977	166.2	14.7	113.4	330.2
Counties					
Alcona	1972	1.2	.4	1.0	2.7
	1977	2.8	.5	2.2	7.0
Allegan	1972	65.9	11.8	45.1	154.2
	1977	110.7	13.8	77.1	277.8
	1978	135.4	15.0	90.9	353.7
Alpena	1972	30.6	4.7	21.4	85.8
	1977	44.0	4.7	32.3	89.3
Antrim	1972	9.3	2.1	7.1	19.4
	1977	18.1	2.6	13.8	39.2
Baraga	1972	5.7	1.2	4.2	12.0
	1977	8.9	1.2	6.4	14.1
Barry	1972	31.4	5.2	19.8	60.7
	1977	38.7	3.8	24.8	81.0

TABLE XV-16. ANNUAL PAYROLL, HOURS, AND WAGES OF PRODUCTION WORKERS, AND VALUE ADDED IN MANUFACTURING ESTABLISHMENTS IN STANDARD METROPOLITAN STATISTICAL AREAS AND SELECTED COUNTIES: 1972, 1977, AND 1978 (cont.)

Area	Year	Yearly payroll[a] ($000,000)	Production workers		Value added by manufacture[c]
			Hours[b] (000,000)	Wages[a] ($000,000)	
Counties (cont.)					
Bay	1972	100.9	15.2	72.8	201.7
	1977	168.0	16.3	124.2	346.4
	1978	198.4	16.4	140.0	399.3
Benzie	1972	4.1	1.0	2.8	7.4
	1977	7.1	1.2	5.2	21.7
Berrien	1972	281.9	41.7	183.7	546.2
	1977	354.5	35.7	226.8	743.2
	1978	374.2	35.4	240.8	769.2
Branch	1972	27.4	5.9	20.6	58.9
	1977	56.4	8.0	40.4	129.2
Calhoun	1972	235.7	32.8	163.5	635.0
	1977	342.9	28.7	234.1	944.5
	1978	380.2	29.3	257.4	1,029.6
Cass	1972	27.1	5.0	18.5	59.2
	1977	51.0	6.8	37.0	98.4
Charlevoix	1972	15.3	3.3	11.1	45.4
	1977	24.4	3.3	17.3	70.9
Cheboygan	1972	9.5	1.9	7.1	22.1
	1977	13.4	1.5	9.3	46.1
Clare	1972	4.3	.7	2.3	10.0
	1977	9.2	1.5	6.5	20.8
Clinton	1972	15.8	2.7	11.4	35.2
	1977	26.6	3.1	20.1	54.4
Crawford	1972	3.6	.7	2.3	7.8
	1977	7.6	.9	4.2	23.7
Delta	1972	23.4	4.1	18.0	40.7
	1977	48.2	4.9	36.1	128.9
Dickinson	1972	13.7	2.6	9.0	22.2
	1977	26.4	3.5	17.8	54.1
Eaton	1972	29.3	4.9	20.3	59.9
	1977	54.5	6.2	36.8	114.2
Emmet	1972	6.8	1.4	5.1	13.3
	1977	14.0	2.0	10.0	24.9
Gladwin	1972	5.5	.8	2.9	7.9
	1977	6.8	.8	4.8	15.2
Gogebic	1972	6.5	1.6	5.4	12.4
	1977	8.2	1.4	6.4	16.0
Grand Traverse	1972	21.8	4.4	14.9	48.8
	1977	39.9	5.2	26.1	107.1
Gratiot	1972	29.8	5.2	19.4	77.1
	1977	34.5	4.4	26.3	109.3
Hillsdale	1972	32.6	6.8	24.1	85.1
	1977	56.6	7.1	41.9	135.5
Houghton	1972	4.4	1.0	3.1	9.3
	1977	6.6	1.1	4.6	13.0
Huron	1972	14.1	2.9	10.7	29.6
	1977	24.7	3.1	17.5	53.9

TABLE XV-16. ANNUAL PAYROLL, HOURS, AND WAGES OF PRODUCTION WORKERS, AND VALUE ADDED IN MANUFACTURING ESTABLISHMENTS IN STANDARD METROPOLITAN STATISTICAL AREAS AND SELECTED COUNTIES: 1972, 1977, AND 1978 (cont.)

Area	Year	Yearly payroll[a] ($000,000)	Production workers Hours[b] (000,000)	Production workers Wages[a] ($000,000)	Value added by manufacture[c]
Counties (cont.)					
Ingham	1972	420.4	55.5	317.4	814.7
	1977	629.9	54.1	487.4	1,096.6
Ionia	1972	38.9	7.2	29.6	71.6
	1977	71.1	9.0	54.7	173.0
	1978	73.6	8.7	55.5	195.5
Iosco	1972	5.8	1.5	4.7	11.8
	1977	11.0	2.0	8.8	27.9
Iron	1972	1.0	.3	.7	1.7
	1977	4.9	.8	3.9	8.5
Isabella	1972	5.4	1.2	4.0	10.2
	1977	13.2	1.6	9.1	31.0
Jackson	1972	173.9	26.4	120.2	377.9
	1977	254.6	25.0	166.2	551.2
	1978	287.9	26.4	187.5	624.7
Kalamazoo	1972	297.7	37.8	178.7	672.0
	1977	499.6	39.4	296.4	1,007.9
	1978	545.0	39.4	321.0	1,202.5
Kalkaska	1972	.7	.2	.5	1.3
	1977	1.5	.2	1.0	2.5
Kent	1972	567.0	88.8	391.4	1,198.8
	1977	920.5	94.8	630.8	2,051.6
	1978	1,056.0	101.8	727.6	2,363.5
Keweenaw	1972	.5	.1	.3	.5
	1977	.9	.1	.6	1.2
Lake	1972	.4	.1	.3	.9
	1977	(D)	(D)	(D)	(D)
Lapeer	1972	21.9	3.6	14.1	39.6
	1977	36.3	4.0	22.8	70.1
Leelanau	1972	1.1	.2	.8	2.6
	1977	1.9	.3	1.5	5.2
Lenawee	1972	123.3	18.4	85.9	251.7
	1977	160.8	17.1	116.5	341.7
	1978	178.8	17.8	128.3	386.5
Livingston	1972	32.9	5.4	21.6	64.0
	1977	53.7	5.9	32.6	133.0
Mackinac	1972	.8	.1	.5	2.2
	1977	1.2	.2	.7	2.6
Macomb	1972	1,284.4	129.7	686.5	1,746.6
	1977	2,113.5	148.1	1,126.8	3,126.3
	1978	2,363.1	151.5	1,259.0	3,320.0
Manistee	1972	21.0	3.9	14.7	42.2
	1977	35.7	3.9	25.4	82.5
Marquette	1972	7.1	1.4	4.7	16.3
	1977	12.4	1.3	7.6	24.9
Mason	1972	17.7	3.4	12.3	44.5
	1977	29.9	3.6	20.1	83.9
Mecosta	1972	9.3	2.4	7.2	13.9
	1977	14.5	2.5	10.9	40.6
Menominee	1972	16.1	3.8	12.0	29.2
	1977	29.5	4.6	21.[illegible]	57.0

TABLE XV-14. LABOR TURNOVER RATES IN MANUFACTURING IN MICHIGAN AND THE UNITED STATES: 1963-1980

	Accessions						Separations					
	Michigan			United States			Michigan			United States		
Year	New hires	Recalls	Total	New hires	Recalls	Total	Quits	Layoffs	Total	Quits	Layoffs	Total
1963	1.4	n.a.	3.6	2.4	n.a.	3.9	.6	1.8	3.7	1.4	1.8	3.9
1964	2.0	n.a.	3.8	2.6	n.a.	4.0	.9	1.6	3.8	1.5	1.7	3.9
1965	2.5	n.a.	4.2	3.1	n.a.	4.3	1.3	1.9	4.1	1.9	1.4	4.1
1966	3.0	n.a.	4.6	3.8	n.a.	5.0	1.7	2.1	5.1	2.6	1.2	4.6
1967	2.4	n.a.	4.1	3.3	n.a.	4.4	1.5	2.3	4.8	2.3	1.4	4.6
1968	2.8	n.a.	4.6	3.5	n.a.	4.6	1.8	1.8	4.7	2.5	1.2	4.6
1969	2.9	n.a.	4.6	3.7	n.a.	4.7	1.9	2.3	5.3	2.7	1.2	4.9
1970	1.5	n.a.	4.2	2.8	n.a.	4.0	1.1	3.7	5.8	2.1	1.8	4.8
1971	1.4	n.a.	3.4	2.6	n.a.	3.9	.9	2.1	3.9	1.8	1.6	4.2
1972	2.4	n.a.	3.7	3.3	n.a.	4.4	1.3	1.2	3.5	2.2	1.1	4.2
1973	2.7	n.a.	3.7	3.9	n.a.	4.8	1.6	.8	3.6	2.7	.9	4.6
1974	1.7	n.a.	3.4	3.2	n.a.	4.2	1.2	2.8	5.1	2.3	1.5	4.8
1975	.7	n.a.	3.4	2.0	n.a.	3.7	.6	3.2	4.6	1.4	2.1	4.2
1976	1.7	.8	3.1	2.6	1.0	3.9	.8	1.1	2.7	1.7	1.3	3.8
1977	1.8	.6	3.0	2.8	.9	4.0	.9	1.1	2.8	1.9	1.2	3.8
1978	1.6	.5	2.3	3.1	.7	4.1	.9	.8	2.2	2.1	.9	3.9
1979	1.5	.7	2.5	2.9	.7	3.9	.9	1.7	3.4	2.0	1.1	4.0
1980	.9	1.5	3.2	2.1	1.1	3.5	.6	2.6	3.8	1.5	1.7	4.0

SOURCES: Michigan Employment Security Commission, special release; Bureau of Labor Statistics, Handbook of Labor Statistics 1975 - Reference Edition, Bulletin 1865 (Washington, D.C.: 1975) Table 53, and Employment and Earnings, vol. 27, no. 3 (Washington, D.C.: March 1980), Table D-1.

n.a.: not available.

TABLE XV-16. ANNUAL PAYROLL, HOURS, AND WAGES OF PRODUCTION WORKERS, AND VALUE ADDED IN MANUFACTURING ESTABLISHMENTS IN STANDARD METROPOLITAN STATISTICAL AREAS AND SELECTED COUNTIES: 1972, 1977, AND 1978 (cont.)

Area	Year	Yearly payroll[a] ($000,000)	Production workers: Hours[b] (000,000)	Production workers: Wages[a] ($000,000)	Value added by manufacture[c]
Counties (cont.)					
Missaukee	1972	.2	(e)	.1	.4
	1977	1.0	.1	.5	2.4
Monroe	1972	101.8	13.8	68.9	189.3
	1977	166.2	14.7	113.4	330.2
	1978	194.0	15.5	137.7	365.5
Montcalm	1972	35.4	6.7	25.7	79.6
	1977	51.9	6.9	37.5	138.4
Montmorency	1972	4.1	1.4	3.6	10.9
	1977	5.3	.9	3.5	16.4
Muskegon	1972	222.8	31.7	151.6	392.3
	1977	368.4	31.0	273.2	656.2
Newaygo	1972	19.3	1.8	6.1	39.4
	1977	24.6	1.6	7.2	46.9
Oakland	1972	1,100.6	130.2	683.9	2,070.0
	1977	1,920.8	149.8	1,159.3	3,629.0
	1978	2,257.4	158.9	1,350.7	4,097.5
Oceana	1972	3.6	1.1	2.8	9.2
	1977	6.2	1.2	4.4	16.8
Ogemaw	1972	3.9	1.0	2.9	19.7
	1977	9.2	1.2	6.2	21.3
Osceola	1972	13.6	3.0	10.0	30.5
	1977	21.1	2.7	15.0	46.6
Oscoda	1972	.9	.2	.8	2.7
	1977	3.0	.5	2.7	12.0
Otsego	1972	7.6	1.4	5.8	19.4
	1977	9.7	1.2	7.3	18.7
Ottawa	1972	145.8	25.7	94.2	315.6
	1977	242.4	28.5	156.0	529.9
	1978	284.9	31.3	182.2	645.6
Presque Isle	1972	1.0	.3	.6	1.4
	1977	2.4	.3	1.4	4.0
Roscommon	1972	2.7	.6	2.2	7.2
	1977	4.2	.7	3.4	9.8
Saginaw	1972	425.9	55.9	323.0	921.1
	1977	708.7	59.5	548.4	1,461.5
	1978	794.8	61.3	618.4	1,614.2
St. Clair	1972	91.3	14.9	61.5	174.2
	1977	122.9	13.0	79.1	254.7
	1978	128.6	13.9	82.7	197.6
St. Joseph	1972	77.5	13.5	54.4	200.8
	1977	111.6	14.0	77.1	294.4
	1978	123.4	14.2	84.9	329.6
Sanilac	1972	27.1	6.5	19.2	50.4
	1977	38.6	5.8	26.6	70.2
Schoolcraft	1972	2.2	.4	1.8	4.1
	1977	4.2	.5	3.4	11.6
Shiawassee	1972	44.6	7.6	29.2	74.2
	1977	64.3	7.4	41.0	117.9
	1978	79.1	8.7	53.7	143.8
Tuscola	1972	21.4	4.7	16.0	46.9
	1977	37.3	4.8	26.3	94.1
Van Buren	1972	37.7	7.9	27.2	83.0
	1977	54.8	7.4	40.2	129.7
	1978	63.8	8.1	47.4	150.8

TABLE XV-16. ANNUAL PAYROLL, HOURS, AND WAGES OF PRODUCTION WORKERS, AND VALUE ADDED IN MANUFACTURING ESTABLISHMENTS IN STANDARD METROPOLITAN STATISTICAL AREAS AND SELECTED COUNTIES: 1972, 1977, AND 1978 (cont.)

Area	Year	Yearly payroll[a] ($000,000)	Production workers: Hours[b] (000,000)	Production workers: Wages[a] ($000,000)	Value added by manufacture[c]
Counties (cont.)					
Washtenaw	1972	450.0	56.8	316.2	907.0
	1977	814.1	65.9	565.4	1,503.7
	1978	957.5	68.6	653.2	1,535.8
Wayne	1972	4,644.5	490.1	2,722.5	7,697.8
	1977	6,699.2	447.4	3,841.9	10,905.7
	1978	7,771.0	444.0	4,231.9	12,117.2
Wexford	1972	20.2	4.1	13.6	44.8
	1977	29.0	4.1	18.6	60.4
Michigan	1972	12,741.4	1,582.0	8,092.2	23,377.4
	1977	20,072.4	1,632.3	12,732.2	27,480.4
	1978	22,892.8	1,671.5	14,240.9	41,804.6

SOURCE: Bureau of the Census, *1977 Census of Manufactures, Geographic Area Series, Michigan* (Washington, D.C.: 1979), MC77-A-23), Table 2.

NOTE: Data for the Flint SMSA are withheld to avoid disclosure of the operations of a single company.

a. Includes all forms of cash compensation before deductions for Social Security, income tas, and so forth. Does not include supplements.

b. Hours worked or paid for at the plant, including actual overtime hours. Excludes hours paid for vacations, holidays, or sick leave, when employee was not at the plant.

c. Adjusted value added is derived by subtracting the cost of raw materials, parts, components, supplies, fuels, goods purchased for resale, and contract work from the value of shipments (including resales) and adjusting for the net change in finished goods and work in process inventories during the year.

d. Withheld to avoid the possibility of disclosing data for a company.

e. Less than 50,000 hours.

TABLE XV-17. DISTRIBUTION OF MICHIGAN MANUFACTURING ESTABLISHMENTS, BY COUNTY: 1967, 1972 AND 1977

County	Number of establishments with fewer than 20 employees			Total number of establishments		
	1967	1972	1977	1967	1972	1977
Alcona	19	18	26	20	20	30
Alger	18	17	32	23	21	35
Allegan	76	85	84	115	137	150
Alpena	32	35	44	44	45	57
Antrim	23	23	40	33	31	51
Arenac	13	10	16	17	17	24
Baraga	40	35	36	48	42	42
Barry	27	29	23	39	42	37
Bay	116	103	96	171	155	144
Benzie	9	11	13	18	21	21
Berrien	202	225	232	335	354	371
Branch	37	44	52	62	76	93
Calhoun	112	120	117	196	202	203
Cass	39	57	57	72	90	91
Charlevoix	24	28	34	38	43	52
Cheboygan	26	28	29	35	37	38
Chippewa	31	26	35	35	29	39
Clare	19	28	32	25	35	44
Clinton	24	28	29	34	40	40
Crawford	9	12	16	13	14	22
Delta	76	53	55	96	69	73
Dickinson	50	43	51	64	59	70
Eaton	47	63	57	74	87	91
Emmet	20	19	29	29	28	41
Genesee	198	207	236	286	286	310
Gladwin	7	17	19	11	24	25
Gogebic	46	40	42	57	49	52
Grand Traverse	33	43	60	55	69	91
Gratiot	26	26	22	44	47	38
Hillsdale	48	47	57	72	82	89
Houghton	45	46	35	58	55	48
Huron	40	40	44	62	57	64
Ingham	159	151	176	239	235	257
Ionia	46	42	47	72	71	74
Iosco	26	26	25	34	36	41
Iron	37	34	38	39	36	43
Isabella	20	22	19	27	30	27
Jackson	195	185	215	310	296	333
Kalamazoo	155	183	227	297	314	366
Kalkaska	10	10	7	12	11	9

TABLE XV-17. DISTRIBUTION OF MICHIGAN MANUFACTURING ESTABLISHMENTS, BY COUNTY: 1967, 1972 AND 1977 (cont.)

County	Number of establishments with fewer than 20 employees			Total number of establishments		
	1967	1972	1977	1967	1972	1977
Kent	552	542	606	895	891	991
Keweenaw	6	5	1	6	6	4
Lake	10	11	10	11	13	10
Lapeer	34	37	47	56	60	79
Leelanau	11	18	22	15	20	26
Lenawee	98	91	109	166	160	176
Livingston	55	65	65	97	113	120
Luce	25	23	24	26	25	27
Mackinac	22	25	20	22	25	23
Macomb	818	1,007	1,149	1,302	1,484	1,740
Manistee	31	23	28	46	41	44
Marquette	56	48	47	70	61	61
Mason	32	27	28	52	52	51
Mecosta	18	16	22	33	25	38
Menominee	67	51	54	94	81	83
Midland	24	25	30	39	41	44
Missaukee	10	8	18	10	8	19
Monroe	82	78	87	124	123	140
Montcalm	40	42	38	59	60	60
Montmorency	26	25	21	29	29	25
Muskegon	138	140	158	245	234	273
Newago	27	25	29	35	32	36
Oakland	1,010	1,222	1,535	1,576	1,839	2,285
Oceana	16	22	20	27	33	31
Ogemaw	20	25	28	25	33	38
Ontonagon	29	7	18	32	9	21
Osceola	20	22	26	31	31	35
Oscoda	23	25	23	23	28	28
Otsego	21	22	35	24	28	40
Ottawa	162	191	225	279	321	368
Presque Isle	21	21	27	26	23	30
Roscommon	26	19	25	28	22	31
Saginaw	152	141	148	252	229	236
St. Clair	130	134	143	199	211	214
St. Joseph	66	78	92	137	155	175
Sanilac	46	53	55	73	79	86
Schoolcraft	24	19	28	27	21	30
Shiawassee	55	48	55	89	84	92
Tuscola	43	41	47	68	64	75
Van Buren	76	63	78	118	113	122

TABLE XV-17. DISTRIBUTION OF MICHIGAN MANUFACTURING ESTABLISHMENTS, BY COUNTY: 1967, 1972 AND 1977 (cont.)

County	Number of establishments with fewer than 20 employees			Total number of establishments		
	1967	1972	1977	1967	1972	1977
Washtenaw	183	204	223	289	306	340
Wayne	2,666	2,470	2,246	4,222	3,803	3,480
Wexford	32	31	52	52	54	74
TOTAL	9,183	9,450	10,248	14,340	14,463	15,655

SOURCE: Bureau of the Census, U.S. Census of Manufactures, 1967, Area Series, Michigan (Washington, D.C.: 1970), MC67(e)-23, Table 9; U.S. Census of Manufactures, 1972, Area Series, Michigan (Washington, D.C.: 1975), MC72(3)-23, Table 9; and U.S. Census of Manufactures, 1978, Area Series, Michigan (Washington, D.C.: 1979), MC77(A)-23, Table 9.

TABLE XV-18. LABOR AND PROPRIETORS' EARNINGS IN MICHIGAN MANUFACTURING, BY COUNTY: 1978 AND 1979 (cont.)

	Labor and proprietors' earnings in manufacturing			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Branch	35.81	76,975	34.08	82,362
Shiawassee	32.93	75,971	34.02	91,306
Van Buren	33.01	70,424	33.31	78,347
Newaygo	33.29	31,549	32.68	32,927
Oakland	32.57	2,518,311	32.53	2,884,185
Sanilac	38.16	54,155	32.51	52,705
Montmorency	35.34	7,197	31.14	6,684
Gratiot	35.05	70,083	30.92	66,259
Eaton	33.17	60,071	29.71	60,525
St. Clair	28.33	157,565	28.87	169,990
Cheboygan	25.91	19,109	27.81	23,836
Livingston	24.69	60,182	25.09	72,160
Benzie	19.96	7,399	24.61	10,090
Arenac	24.94	8,896	24.49	9,952
Ogemaw	23.96	10,311	24.39	12,903
Alcona	22.89	3,825	23.40	4,647
Otsego	21.57	16,351	23.33	20,539
Huron	23.73	37,952	22.86	42,094
Tuscola	24.20	45,990	22.86	50,383
Lapeer	26.87	58,674	22.22	52,350
Dickinson	23.42	35,076	22.20	38,089
Gladwin	22.01	8,216	22.05	10,032
Clinton	23.46	28,099	21.60	29,260
Oscoda	21.25	2,949	20.16	3,049
Oceana	15.38	8,878	17.52	11,005
Emmet	15.86	17,577	17.11	21,405
Gogebic	17.82	10,379	16.98	11,099
Grand Traverse	16.35	54,800	16.73	63,553
Schoolcraft	16.22	5,263	16.60	6,029
Iron	16.32	7,289	16.44	8,132
Clare	18.03	10,073	16.41	10,435
Roscommon	15.43	6,101	15.21	6,836
Kalkaska	D	D	14.23	6,196
Mecosta	15.11	15,756	14.23	16,455
Ontonagon	15.59	7,976	13.69	7,838

TABLE XV-18. LABOR AND PROPRIETORS' EARNINGS IN MICHIGAN MANUFACTURING, BY COUNTY: 1978 AND 1979.

County	Labor and proprietors' earnings in manufacturing			
	1978		1979	
	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Genesee	60.41	2,348,181	59.16	2,461,295
Midland	54.32	326,851	54.32	336,135
Saginaw	55.64	963,746	53.75	1,014,566
St. Joseph	54.52	148,943	52.16	164,786
Macomb	54.63	2,468,151	52.08	2,521,099
Lenawee	50.72	221,620	49.15	242,273
Manistee	48.06	47,484	48.00	52,018
Berrien	48.21	483,077	47.47	504,907
Wayne	48.10	10,140,972	47.11	10,615,913
Muskegon	46.90	419,670	46.43	459,465
Menominee	41.62	40,321	46.18	44,096
Ottawa	47.22	376,565	45.92	421,162
Hillsdale	48.12	81,956	45.11	85,917
Washtenaw	44.94	1,105,506	44.85	1,236,994
Osecola	46.18	27,672	44.70	29,985
Allegan	43.30	110,200	44.54	125,787
Calhoun	44.84	439,656	43.75	469,401
Charlevoix	41.92	36,489	42.07	41,361
Barry	43.78	54,690	42.03	49,763
Cass	46.65	78,095	41.29	74,263
Kalamazoo	40.77	611,658	40.70	694,022
Kent	37.97	1,191,485	39.73	1,452,823
Antrim	38.02	20,058	38.56	22,825
Bay	39.44	228,900	37.60	237,498
Ionia	41.20	77,857	37.39	75,614
Alger	37.49	11,201	37.37	12,331
Jackson	37.62	338,819	37.27	370,581
Mason	36.28	39,425	36.78	45,389
Delta	36.80	61,406	36.68	68,189
Montcalm	40.83	74,051	36.61	71,842
Baraga	38.64	12,387	36.09	12,710
Wexford	34.12	40,090	35.36	46,667
Alpena	36.33	21,359	34.81	63,030
Monroe	39.24	182,218	34.44	173,871
Ingham	34.18	891,477	34.21	1,009,669

TABLE XV-18. LABOR AND PROPRIETORS' EARNINGS IN MICHIGAN MANUFACTURING, BY COUNTY: 1978 AND 1979 (cont.).

County	Labor and proprietors' earnings in manufacturing			
	1978		1979	
	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Iosco	11.67	13,718	12.59	16,021
Crawford	23.75	7,306	11.75	3,465
Isabella	9.61	19,915	9.49	21,623
Missaukee	7.75	6,708	7.59	2,001
Keweenaw	8.94	466	7.33	400
Houghton	7.28	8,848	6.92	9,261
Leelanau	6.42	2,344	6.60	2,241
Mackinac	4.65	1,794	4.85	2,066
Luce	4.52	1,666	4.55	1,861
Lake	D	D	4.33	581
Chippewa	4.18	4,177	3.69	3,923
Marquette	3.07	12,883	3.46	15,897
Presque Isle	3.30	1,640	3.09	1,766
Michigan	43.51	27,449,884	42.54	29,503,010
United States	26.19	346,128,000	26.11	387,670,000

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

NOTE .Counties are ranked according to this sector's relative contribution to total labor and proprietors' earnings (next-to-last column). There numbers pertain to earnings generated within the county, irrespective of the residence of the people who received them. For a complete tabulation of earnings at the state level, see Tables VI-2 and VI-3. The earnings residence adjustment for all industries is shown in Table VI-12.

(D): Withheld to avoid disclosing data for individual companies.

TABLE XV-19. RANKING OF MICHIGAN COUNTIES ACCORDING TO PERCENTAGE CHANGE IN LABOR AND PROPRIETORS' EARNINGS IN MANUFACTURING: 1978-1979.

County	Percentage change	
	1974-1979	1978-1979
Benzie	163	36
Otsego	107	26
Cheboygan	93	25
Ogemaw	185	25
Oceana	166	24
Marquette	58	23
Emmet	81	22
Gladwin	99	22
Kent	89	22
Alcona	454	21
Livingston	124	20
Shiawassee	65	20
Iosco	110	17
Missaukee	461	17
Grand Traverse	140	16
Wexford	81	16
Mackinac	56	15
Mason	65	15
Oakland	97	15
Schoolcraft	86	15
Allegan	77	14
Antrim	84	14
Ingham	107	13
Charlevoix	121	13
Kalamazoo	64	13
Arenac	161	12
Iron	79	12
Luce	12	12
Midland	48	12
Ottawa	86	12
Roncommon	240	12
Washtenaw	127	12
Delta	66	11
Huron	59	11
St. Joseph	71	11
Van Buren	45	11
Alger	64	10
Manistee	108	10
Tuscola	55	10
Barry	48	9
Dickinson	88	9
Isabella	103	9
Jackson	45	9
Lenawee	43	9
Menominee	58	9
Muskegon	47	9
Osecola	18	8
Presque Isle	61	8
St. Clair	45	8
Branch	102	7
Calhoun	56	7
Gogebic	3	7
Alpena	52	6
Berrien	26	5
Genesee	108	5
Hillsdale	72	5
Saginaw	90	5
Wayne	59	5
Houghton	33	5
Bay	65	4
Clare	137	4
Clinton	84	4
Mecosta	60	4
Newaygo	52	4
Baraga	61	3
Oscoda	82	3
Macomb	71	2
Eaton	58	1
Ontonagon	32	-2
Ionia	75	-3
Montcalm	19	-3
Sanilac	73	-3
Leelanau	26	-4
Cass	74	-5
Gratiot	34	-5
Monroe	40	-5
Chippewa	71	-6
Montmorency	94	-7
Lapeer	66	-11
Keweenaw	-62	-14
Crawford	24	-53
Kalkaska	208	D
Lake	-57	D
Michigan	72	7
United States	63	12

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

(D): Withheld to avoid disclosing data for individual companies.

TABLE XV-20. RANKING OF MICHIGAN COUNTIES ACCORDING TO EARNINGS IN DURABLE GOODS MANUFACTURING AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979

County	Percentage	
	1978	1979
Genesee	58.80	57.53
Saginaw	53.08	51.06
Macomb	46.74	44.93
Wayne	42.66	41.67
Washtenaw	41.84	40.89
Muskegon	41.20	40.68
Berrien	40.22	39.16
Hillsdale	41.16	37.97
St. Joseph	39.71	37.93
Charlevoix	38.65	38.86
Barry	40.23	38.32
Ottawa	48.65	37.79
Antrim	35.59	36.13
Lenawee	37.55	36.08
Bay	33.89	32.38
Ingham	32.15	32.24
Menominee	33.53	31.92
Jackson	30.38	30.66
Kent	28.92	30.60
Oakland	30.29	30.40
Ionia	26.67	30.00
Shiawassee	28.57	29.88
Monroe	34.00	29.83
Montcalm	32.97	28.49
Branch	28.98	26.88
Eaton	29.43	25.75
Manistee	25.11	25.52
Calhoun	24.01	23.96
Van Buren	23.18	23.07
Mason	22.47	22.96
Alpena	23.24	22.73
Baraga	21.19	22.34
Arenac	23.42	22.22
Otsego	20.00	21.77
Allegan	19.72	21.14
Clinton	22.93	21.05
Delta	20.92	20.75
Wexford	19.80	20.61
Livingston	20.21	19.71
Ogemaw	19.24	19.62
Gladwin	(D)	19.33
Osceola	21.28	19.30
Kalamazoo	19.14	19.23
Tuscola	20.28	19.21
Dickinson	19.54	18.49
Huron	24.93	18.17
St. Clair	18.17	18.01
Sanilac	21.98	17.74
Iron	14.65	15.00
Emmet	14.00	14.96
Kalkaska	(D)	14.21
Gratiot	15.98	13.96
Roscommon	13.76	13.74
Lapeer	18.01	13.48
Gogebic	12.65	12.26
Iosco	11.30	12.20
Clare	13.04	11.29
Cheboygan	11.68	10.77
Grand Traverse	8.99	9.27
Oceana	7.27	8.76
Crawford	21.10	8.30
Isabella	7.94	7.85
Newaygo	5.82	6.74
Missaukee	6.54	6.48
Alger	6.34	6.28
Houghton	5.06	5.07
Schoolcraft	4.35	4.44
Leelanau	3.50	3.23
Chippewa	3.28	2.57
Mackinac	2.93	3.04
Presque Isle	2.74	2.62
Marquette	1.59	1.56
Midland	.91	.81
Alcona	(D)	(D)
Benzie	(D)	(D)
Cass	41.98	(D)
Keweenaw	8.94	(D)
Lake	(D)	(D)
Luce	(D)	(D)
Mecosta	(D)	(D)
Montmorency	(D)	(D)
Ontonagon	(D)	(D)
Oscoda	(D)	(D)
Michigan	37.05	36.15
United States	16.98	17.09

SOURCE;; Bureau of Economic Analysis, Regional Economics Information System

(D): Withheld to avoid disclosing data for individual companies

TABLE XV-21. RANKING OF MICHIGAN COUNTIES ACCORDING TO EARNINGS IN NON-DURABLE GOODS MANUFACTURING AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979

County	Percentage 1977	Percentage 1978	County	Percentage 1977	Percentage 1978
Midland	53.41	53.50	Shiawassee	4.35	4.13
Alger	31.15	31.09	Washtenaw	3.10	3.96
Newaygo	27.47	25.94	Eaton	3.74	3.95
Osecola	24.89	25.40	Dickinson	3.89	3.72
Allegan	23.57	23.40	Barry	3.55	3.70
Manistee	22.95	22.47	Tuscola	3.92	3.65
Kalamazoo	21.63	21.46	Crawford	2.74	3.45
Calhoun	20.78	19.79	Leelanau	2.93	3.37
Cheboygan	14.22	17.04	Charlevoix	3.27	3.20
Gratiot	19.07	16.96	Gladwin	(D)	2.72
Delta	15.89	15.93	Saginaw	2.56	2.70
Sanilac	16.18	14.77	Antrim	2.43	2.43
Wexford	14.32	14.74	Arenac	1.52	2.27
St.Joseph	14.80	14.23	Emmet	1.86	2.15
Mason	13.81	13.81	Oakland	2.28	2.13
Baraga	17.46	13.75	Ingham	2.03	1.97
Lenawee	13.17	13.05	Marquette	1.48	1.90
Schoolcraft	11.87	12.16	Houghton	2.22	1.84
Alpena	13.09	12.08	Mackinac	1.71	1.81
St. Clair	10.15	10.86	Isabella	1.67	1.64
Van Buren	9.83	10.24	Genesee	1.60	1.63
Kent	9.05	9.13	Otsego	1.58	1.56
Oceana	8.10	8.76	Roscommon	1.75	1.47
Lapeer	8.81	8.75	Iron	1.67	1.44
Berrien	8.00	8.31	Missaukee	1.21	1.12
Menominee	8.10	8.25	Chippewa	.90	1.11
Ottawa	8.57	8.13	Clinton	.52	.55
Montcalm	7.86	8.13	Presque Isle	.56	.47
Grand Traverse	7.36	7.47	Iosco	.38	.39
Ionia	14.54	7.36	Keewenaw	0	0
Branch	6.83	7.19	Lake	0	0
Macomb	7.89	7.15	Alcona	(D)	(D)
Hillsdale	6.96	7.13	Benzie	(D)	(D)
Jackson	6.91	6.61	Cass	4.67	(D)
Muskegon	5.70	5.75	Kalkaska	(D)	(D)
Wayne	5.43	5.44	Luce	(D)	(D)
Livingston	4.48	5.38	Mecosta	(D)	(D)
Bay	5.56	5.22	Montmorency	(D)	(D)
Clare	4.99	5.11	Ontonagon	(D)	(D)
Ogemaw	4.71	4.77	Oscoda	(D)	(D)
Gogebic	5.18	4.72			
Huron	6.31	4.69	Michigan	6.45	5.21
Monroe	5.28	4.61	United States	9.21	9.01

SOURCE: Bureau of Economic Analysis, Regional Economics Information System

(D): Withheld to avoid disclosing data for individual companies.

TABLE XV-22. SHIPMENTS OF IRON AND STEEL CASTINGS AND RAW STEEL FROM MICHIGAN FOUNDRIES AND STEEL WORKS: 1951-1980

(In thousands of short tons)

Year	Gray iron castings	Malleable iron castings	Steel castings	Steel
1951	2,101	264	141	4,829
1952	1,893	249	93	4,552
1953	2,331	268	80	5,142
1954	2,004	219	52	4,224
1955	2,668	300	63	5,999
1956	1,986	225	63	6,231
1957	1,923	226	51	6,220
1958	1,441	174	39	4,568[a]
1959	1,893	256	51	5,634[a]
1960	1,913	248	40	6,529[a]
1961	1,669	207	40	6,644[a]
1962	2,007	252	47	7,126[a]
1963	2,156	285	50	8,447[a]
1964	2,291	298	55	9,435
1965	2,721	353	58	8,990
1966	2,712	341	66	10,004
1967	2,203	309	55	9,247
1968	2,500	248	53	9,220
1969	2,602	359	57	10,039
1970	2,029	283	50	9,581
1971	2,374	352	42	9,069
1972	2,695	412	57	9,380
1973	2,863	436	67	10,945
1974	2,601	342	62	10,459
1975	2,131	300	53	9,093
1976	2,762	449	52	10,382
1977	3,113	399	45	10,051
1978	3,208	456	54	10,789
1979	n.a.	n.a.	n.a.	10,922
1980	n.a.	n.a.	n.a.	7,877

SOURCE: Bureau of the Census, Facts for Industry, Series M21C (discontinued 1958), and Current Industrial Reports, Series M33A, Annual Summaries, 1958 through 1978 (Washington, D.C.: annually), Table 10 (1978); and Annual Summaries 1979 and 1980, Table 13.

a. Includes Wisconsin.
n.a.: Not available.

TABLE XV-23. RAW STEEL PRODUCTION IN MICHIGAN AND THE UNITED STATES, BY MONTH: 1971-1981

(000 tons)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Michigan						
1971	758	666	741	809	938	831	826	691	637	729	711	734
1972	779	734	797	792	840	705	680	799	748	828	823	854
1973	807	786	895	936	995	925	930	920	930	968	890	963
1974	935	824	916	841	871	864	919	864	837	949	824	815
1975	867	787	852	738	693	654	693	710	776	783	708	766
1976	818	823	859	821	966	927	888	896	805	833	904	849
1977	823	796	884	823	877	891	811	908	875	768	799	775
1978	772	741	912	807	902	909	978	940	950	1,035	920	926
1979	1,002	878	1,044	988	1,025	981	968	942	819	823	753	751
1980	839	810	828	803	585	365	437	452	546	737	760	706
1981	770	702	827	798	788	744	792	794	684	579	590	--
						United States						
1971	11,274	10,874	12,645	12,565	12,920	11,491	9,942	5,774	7,678	8,211	8,053	8,784
1972	10,001	9,980	11,588	11,588	11,937	10,980	10,341	10,842	10,913	11,657	11,398	11,878
1973	12,372	11,626	13,088	12,789	13,174	12,488	12,290	12,181	12,229	12,876	12,587	12,722
1974	12,726	11,598	12,758	12,442	12,752	12,185	12,155	11,837	11,849	12,617	11,614	10,960
1975	11,584	10,862	11,980	10,667	9,864	8,744	8,370	8,648	9,295	9,214	8,709	8,846
1976	9,835	9,907	11,294	11,439	12,136	11,605	11,400	11,128	10,463	10,295	9,227	9,215
1977	9,089	8,859	11,049	11,167	12,201	11,384	10,319	10,392	10,050	10,442	9,748	10,031
1978	10,301	9,643	11,082	11,528	12,320	11,861	11,387	11,550	11,467	12,104	11,654	11,812
1979	11,105	10,562	12,576	12,196	12,789	12,230	11,821	11,309	10,541	10,810	9,997	9,996
1980	10,701	10,332	11,439	10,658	9,226	7,501	6,796	7,019	7,767	9,442	10,057	10,180
1981	10,590	10,028	11,744	11,243	11,374	10,451	10,160	10,120	9,618	9,002	7,962	--

SOURCE: American Iron and Steel Institute, special release.

TABLE XV-25. MICHIGAN OIL REFINERIES: 1980

Company	Refinery location	Nominal capacity[a] bls. per day
Bay Refining, Division Dow Chemical Company	Bay City	17,000
Crystal Refining Company	Carson City	6,200
Lakeside Refining Company	Kalamazoo	5,600
Total Leonard, Inc. (Leonard Refineries, Inc.) Leonard Division	Alma	42,000
Marathon Oil Company	Detroit	68,500
Osceola Refining Company	West Branch	12,500
TOTAL REFINERY CAPACITY		151,800
Average daily amount of crude refined during 1978, all Michigan refineries		
Michigan crude		65,047
Crude produced elsewhere		36,628
TOTAL		101,675

SOURCE: Michigan Department of Natural Resources, Michigan's Oil and Gas Fields, 1980 (Lansing: 1981), p. 54.

a. Individual refinery operating rates may be less or slightly more than nominal rates shown.

TABLE XV-26. PULPWOOD CONSUMPTION AND WOODPULP PRODUCTION AND CONSUMPTION IN MICHIGAN AND U. S. MILLS: 1963-1979

	Pulpwood consumption[a]				Woodpulp production[b]		Woodpulp consumption[b]	
	Softwood		Hardwood					
Year	Michigan	United States	Michigan	United States	Michigan	United States	Michigan	United States
1963	199,869	35,661,356	530,617	10,773,661	548,505	30,121,216	n.a.	30,219,885
1964	205,095	38,315,437	556,677	11,395,328	570,129	32,428,928	1,134,481	32,030,985
1965	232,696	39,676,054	628,869	12,294,203	605,596	33,993,069	1,203,186	34,006,285
1966	225,122	42,833,416	605,407	13,425,926	590,324	36,639,984	1,206,303	36,649,041
1967	207,807	42,219,242	595,806	13,553,275	575,937	36,660,048	1,174,397	37,049,675
1968	235,947	45,067,973	487,539	14,719,909	496,002	39,399,694	1,124,262	39,386,740
1969	162,558	48,904,661	618,505	16,112,001	588,945	43,416,138	1,324,904	44,009,761
1970	181,296	51,335,102	628,534	16,188,919	587,333	43,662,620	1,264,047	43,394,401
1971	157,163	50,932,446	598,105	16,568,196	572,620	43,932,681	1,204,573	44,182,674
1972	145,529	53,613,247	622,538	17,924,650	615,386	46,767,276	1,323,572	47,347,254
1973	110,019	54,768,368	622,893	18,513,673	593,157	47,936,719	1,398,627	48,697,592
1974	224,164	54,634,406	931,741	19,824,606	872,623	48,417,138	1,432,658	48,299,929
1975	204,555	48,932,368	648,046	16,488,703	648,895	43,247,697	1,080,832	42,391,995
1976	(D)	54,788,870	782,555	18,420,279	804,478	48,803,862	1,239,556	48,724,021
1977	(D)	55,509,963	834,234	18,460,862	862,401	49,032,269	1,300,144	48,477,357
1978	(D)	54,939,233	903,019	19,231,120	922,907	49,694,040	1,426,659	49,613,588
1979	(D)	57,255,892	881,425	19,630,850	955,295	50,612,015	1,507,400	51,623,096

SOURCE: Bureau of the Census, Current Industrial Reports, Series M26A, Annual Summaries, 1963 through 1979 (Washington, D.C.: annually), Tables 4, 8, and 9 (1980).

a. Cords of 128 cubic feet, roughwood basis.

b. Short tons

(D): Withheld to avoid disclosing data for individual companies.

TABLE XV-27. PAPER AND PAPERBOARD PRODUCTION IN MICHIGAN AND THE UNITED STATES: 1966-1979 (cont.)

(Short tons)

	Paper and board total	Paper				
		Coated printing and converting	Book	Packaging and industrial	Tissue[a]	Total
1972						
Michigan	2,413,557	320,067	151,458	90,134	43,898	998,450
United States	59,457,076	3,545,830	3,010,018	5,199,134	228,034	25,435,338
1973						
Michigan	2,589,839	378,655	208,788	106,522	42,062	1,134,500
United States	61,683,838	3,829,821	3,142,354	5,112,304	240,492	26,535,949
1974						
Michigan	2,473,582	376,933	193,765	96,162	36,338	1,133,045
United States	59,934,461	3,977,527	2,831,562	5,360,480	220,923	26,861,445
1975						
Michigan	1,854,576	202,872	(D)	90,263	34,009	828,542
United States	52,359,215	3,327,976	2,401,131	4,383,973	177,202	23,294,793
1976						
Michigan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
United States	60,043,429	4,063,497	2,973,781	5,040,962	193,214	26,534,322
1977						
Michigan	2,440,955	425,266	166,528	82,177	34,715	1,840,844
United States	61,868,977	4,188,745	3,069,566	5,161,515	194,384	27,491,035
1978						
Michigan	2,541,946	428,007	365,953	(D)	30,602	1,261,415
United States	64,300,395	4,513,213	7,315,285	5,280,007	209,693	28,505,617
1979						
Michigan	2,538,189	460,256	330,495	(D)	21,841	1,290,429
United States	66,607,595	4,503,422	7,727,532	5,503,278	223,565	30,011,834

SOURCE: Bureau of the Census, Current Industrial Reports, Series M26A, Annual Summaries, 1966 through 1979 (Washington, D.C.: annually), Tables 10 and 11 (1979).

a. Except sanitary and thin.

(D): Withheld to avoid disclosing data for individual companies.

n.a.: not available.

TABLE XV-28. WINE SHIPMENTS BY WINERY, AND BEER SHIPMENTS BY BREWERY, IN MICHIGAN: 1978-1980

Producer	1978	1979	1980
Winery shipments (gallons)[a]			
Boskydel	2,451.1	3,139.9	3,332.1
Bronte	106,246.5	98,690.7	94,463.6
Chateau Grand Traverse	15,997.9	11,077.7	11,190.3
Chi	0	13,691.9	37,305.8
Fenn (Fennville)	17,271.7	14,119.4	16,448.0
Fenn (Rockford	0	1,588.0	1,168.7
Fink	836.6	608.7	898.1
Frontenac	98,288.2	99,706.4	79,789.0
Lakeside	29,807.3	33,488.5	24,496.1
Leelanau (Omena)	12,978.7	13,160.2	24,633.3
Leelanau (T.C.)	0	11,221.8	12,071.3
L. Mawby	0	298.4	362.4
Milan	115,734.5	127,516.7	112,145.8
St. Julian	144,077.9	161,571.8	139,074.8
Tabor Hill	27,168.9	1,475.0	n.a.
Vendramino	8,065.5	1,864.1	689.3
Warner Vineyards	272,185.4	300,474.5	332,644.4
TOTAL	859,286.4	893,693.7	890,712.5
Brewery shipments (barrels)[a]			
Carling			
Sold in Michigan	352,352.0	443,501.0	599,492
Shipped out	186,861.0	255,432.0	245,286
Bottled and barreled	539,213.0	698,933.0	844,778
Geyer			
Sold in Michigan	3,295.0	3,222.0	3,180
Shipped out	48.0	24.0	61
Bottled and barreled	3,343.0	3,246.0	3,241
Stroh			
Sold in Michigan	673,360.0	640,454.0	632,796
Shipped out	5,534,898.0	5,131,490.0	5,239,536
Bottled and barreled	6,008,258.0	5,771,944.0	5,872,332
Stroh-Goebel			
Sold in Michigan	148,269.0	101,191.0	105,888
Shipped out	172,072.0	142,115.0	176,939
Bottled and barreled	320,341.0	243,306.0	282,827
TOTAL			
Sold in Michigan	1,177,275.0	1,188,368.0	1,341,356
Shipped out	5,693,880.0	5,529,061.0	5,661,822
Bottled and barreled	6,871,155.0	6,717,429.0	7,003,178

SOURCE: Michigan Liquor Control Commission, special release.

a. Withdrawals from bond.

n.a.: Not available.

TABLE XV-29. PRODUCTION OF CHLORINE GAS, SODIUM HYDROXIDE, AND NEW SULFURIC ACID IN MICHIGAN AND THE UNITED STATES: 1960-1979

(In thousands of short tons)

Year	Chlorine gas		Sodium hydroxide		New sulfuric acid	
	Michigan	United States	Michigan	United States	Michigan	United States
1960	516,782	4,636,939	562,473	4,971,860	324,318	17,085,190
1961	495,257	4,600,791	528,795	4,913,692	307,979	17,058,042
1962	512,877	5,142,876	546,791	5,442,890	331,901	19,701,063
1963	526,042	5,464,080	570,857	5,814,403	355,824	20,037,537
1964	568,718	5,945,215	619,923	6,388,987	347,386	21,959,065
1965	577,070	6,517,079	623,346	6,742,043	323,326	23,812,638
1966	593,522	7,204,372	653,731	7,616,346	346,669	27,413,530
1967	589,407	7,679,868	686,893	8,397,879	305,609	27,735,504
1968	601,412	8,444,459	672,156	8,867,713	246,570	27,403,538
1969	627,441	9,413,885	671,836	9,916,567	203,487	28,233,063
1970	583,095	9,763,702	610,705	10,140,988	169,000	28,259,900
1971	502,484	9,352,437	522,037	9,666,521	166,500	28,144,800
1972	509,564	9,873,371	528,375	10,217,400	132,200	29,924,000
1973	532,760	10,402,341	583,571	10,733,800	100,900	33,423,200
1974	562,781	10,753,109	613,493	11,188,519	96,900	32,233,600
1975	444,566	9,103,597	484,294	9,582,997	82,000	31,417,700
1976	431,738	10,378,432	471,657	10,516,090	n.a.	32,279,700
1977	366,508	10,573,014	408,092	10,932,772	n.a.	34,155,900
1978	379,665	11,051,665	420,777	11,326,475	n.a.	38,419,400
1979	465,815	12,227,874	513,073	12,772,125	n.a.	43,118,500

SOURCE: Bureau of the Census, Current Industrial Reports, Series M28A, Annual Summaries, 1960 through 1979 (Washington, D.C.: annually), Table 3 (1979 chlorine gas and sodium hydroxide data), and Current Industrial Reports, Series MA28A, Annual Sulfuric Acid Supplement, 1960 through 1979 (Washington, D.C.: annually), Table 4 (1979).

n.a.: not available

TABLE XV-24. PIG IRON PRODUCTION IN MICHIGAN AND THE UNITED STATES, BY MONTH, 1975-1981

(000 tons)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Michigan						
1975	638	598	660	594	573	545	576	576	592	578	518	568
1976	597	601	619	605	705	662	626	613	568	588	622	588
1977	553	529	581	570	592	622	569	628	614	494	531	534
1978	540	512	628	527	627	626	671	649	638	685	600	620
1979	612	581	691	652	680	662	633	631	591	569	497	518
1980	576	552	556	581	460	296	336	349	345	470	490	463
1981	496	457	534	496	488	474	514	532	493	448	403	--
						United States						
1975	7,371	7,135	8,071	7,432	6,990	6,239	5,968	6,031	6,245	6,292	5,981	6,234
1976	6,636	6,754	7,519	7,600	8,116	7,674	7,999	7,751	6,995	6,969	6,384	6,272
1977	5,985	5,327	7,174	7,382	7,962	7,530	7,008	6,763	6,526	6,595	6,108	6,419
1978	6,390	5,971	6,894	7,189	7,936	7,754	7,636	7,515	7,391	7,809	7,533	7,668
1979	7,064	6,636	7,953	7,726	8,277	8,026	7,799	7,351	6,762	6,779	6,258	6,372
1980	6,583	6,357	7,115	6,677	5,906	4,664	4,222	4,360	4,596	5,621	6,132	6,489
1981	6,603	6,108	7,193	6,755	6,842	6,408	6,268	6,259	5,889	5,422	4,782	--

SOURCE: American Iron and Steel Institute, special release.

TABLE XV-27. PAPER AND PAPERBOARD PRODUCTION IN MICHIGAN AND THE UNITED STATES: 1966-1979

(Short tons)

	Paper and board total	Paper				
		Coated printing and converting	Book	Packaging and industrial	Tissue[a]	Total
1966						
Michigan	2,379,745	244,104	199,414	n.a.	62,233	942,772
United States	47,189,295	3,078,190	2,367,675	n.a.	265,088	20,631,158
1967						
Michigan	2,212,997	211,927	129,213	n.a.	59,831	821,823
United States	46,892,610	3,085,735	2,260,259	1,157,560	252,116	20,703,268
1968						
Michigan	2,228,689	238,689	185,978	n.a.	56,478	910,065
United States	50,703,188	3,132,330	2,537,068	4,844,827	259,569	23,091,110
1969						
Michigan	2,304,522	247,310	179,299	95,079	50,653	948,912
United States	54,057,691	3,345,257	2,667,469	5,084,808	223,557	23,504,598
1970						
Michigan	969,109	298,226	134,346	97,191	48,853	954,633
United States	5,329,393	3,277,159	2,603,116	5,031,568	215,155	23,409,077
1971						
Michigan	2,274,575	282,422	120,682	92,905	39,931	892,427
United States	55,091,530	3,250,694	2,758,214	5,014,903	218,894	23,837,840

Chapter VII of Walter L. Dunham, Banking and Industry in Michigan (Detroit, Madeira Publishing Co.: 1929), pp. 113-138 is reproduced here because of its relevance in automotive history.

A Twentieth Century Miracle

The Michigan of today, and especially that industrial area comprising roughly the southern half of the Lower Peninsula, is a different world from the Michigan of 1900.

At the opening of the Twentieth Century, although Detroit was prominent as an industrial and commercial center, it still retained much of its original "old worldliness." It was a pleasant city of less than half a million population, with long tree-lined avenues of comfortable homes, and its life was characterized largely by the leisureliness of the old French regime. Today, with two millions of people and thousands of industrial plants, Detroit is still beautiful, but the leisureliness is gone and for the most part the city's beauty is of a strictly utilitarian aspect.

In the early days of the present century, the state outside of Detroit were pre-eminently agricultural, except for the mining and lumber industries in the north and the furniture industry centering in Grand Rapids. The towns and villages were still to some extent the raw products of their time and place. But today no finer small communities may be found anywhere in the world, and most of them are prosperous seats of industry as well as centers of agriculture.

During this period of nearly three decades, the banking interests of Detroit and Michigan kept pace with the startling growth of commerce and industry. Owing, however, to the complication of details connected with the commercial and industrial developments, it will be necessary to tell the story of Michigan banking during the Twentieth Century in a succeeding chapter.

Rise of the Motor Car Industry.

Detroit is generally conceded to be the birthplace of the automobile, but as a matter of fact the first commercially feasible motor car was built by Ransom E. Olds in Lansing, Michigan, and was completed in September, 1886. This was the first car ever made and sold for utilitarian purposes. By 1894 Mr. Olds had evolved a true internal combustion engine, and in 1896 a combination of Detroit and Lansing capitalists joined with him to organize the Olds Motor Vehicle Company, of Lansing, with a capital stock of $5,000. This was the first automobile company in America, with the exception of the Duryea Motor Wagon Company, of Springfield, Mass., organized a year or so earlier.

The first automotive plant in Detroit was built in 1898, on the present site of the Morgan & Wright tire plant. This came after Mr. Olds had tried unsuccessfully to raise money in the east for a plant on the seaboard. On his return to Michigan he conferred with S. L. Smith, wealthy Detroit copper magnate, who had put some money into the original Olds company. Mr. Smith expressed a willingness to invest a larger sum in the automotive project, and the result was the organization in 1899 of the Olds Motor Works, a reincorporation of the Olds Motor Vehicle Company and the Olds Gas Engine Company, of Lansing. Mr. Smith and Henry Russel, of Detroit, who also had been a stockholder in the original company, put up most of the capital for the new concern. Authorized capital was $350,000, of which $150,000 was paid in.

Few recall that the early production of Olds at the Jefferson Avenue plant was of both gasoline and electric cars. Experimentation was carried on for more than a year and the famous old curved-dash cars came on the market in 1901, when 425 of them were sold.

Early next spring the front end of the plant was burned, and this near-tragedy had a powerful influence on the industry in Detroit. The Olds Company combined its machine shop and foundry in the rear building, but had to get parts, so Leland & Faulkner were induced to supply engines, the Dodge Brothers made transmissions and B. F. Everitt did the upholstery work. Production that year was 2,500, the automobile became a fact and this may have made it easier for Henry Ford to finance his new idea of a car. Both factories were operated until 1905 when that at Detroit was abandoned.

Meanwhile the Olds Motor Works made money and it was the first of its kind to do so in America. It was this spectacular development, about which there had been much skepticism, that persuaded the farthest-sighted of Detroit businessmen and bankers to a belief in the future of the automobile.

Thus the city began its ascent toward its present commanding position as automotive capital of the world.

In 1904, owing to differences with his associates, Mr. Olds severed his connection with the Olds Motor Works, and in 1905, in co-operation with a number of Michigan and eastern capitalists, he started the Reo Motor Car Company, of Lansing, which has since become one of the most successful of its kind in the world. Meanwhile the Olds Motor Works, in 1907, was combined by W. C. Durant with the Buick Motor Car Company to form the General Motors Company.

Ford Motor Company.

While R. E. Olds was struggling for a foothold with his new company, another man in Detroit was experimenting toward the development of an automobile that was destined eventually to prove most effective of all in revolutionizing the transportation of the world. His name, of course, was Henry Ford. His ambition then, as doubtless it is now, was to manufacture in quantity at the lowest possible price the best car that science and ingenuity could devise.

The Henry Ford Automobile Company was organized in 1901, the first venture in the automotive manufacturing field to bear Mr. Ford's name. But conflicts of opinion soon caused him to leave the concern, and in 1903 the present Ford Motor Company was formed. Since that time the development of the Ford interests has been one of the wonders of the modern world.

Original stockholders of the Ford Motor Company included John F. and Horace E. Dodge, Alex Y. Malcomson, John S. Gray, Albert Strelow, Horace H. Rackham, C. H. Bennett, John W. Anderson, James Couzens and Miss R. V. Couzens, V. C. Frey and C. H. Woodhall. Mr. Ford was given twenty-five per cent of the stock, and was made vice-president and factory manager. Authorized capital was $100,000, of which $28,000 was paid in.

Owing to differences over matters of policy, and to the timidity of several stockholders, Mr. Ford was able to increase his stock holdings to fifty-one per cent by 1906, and to fifty-eight and one-half per cent a year or so later. Today the Ford Motor Company and its allied interests, comprising factories, mines, timber lands, railroads and ships, are owned solely by the Ford family. The Ford Motor Company is now capitalized at $100,000,000, and the Ford fortune is estimated at something near $2,000,000,000.

The first Ford plant was located at Bellevue and Mack avenues, the second at Cass and Burroughs avenues, the third on Piquette avenue, the fourth in Highland Park. Ford production is now divided between the Highland Park plant, the Lincoln plant on West Warren avenue, the great River Rouge plant in Fordson and the plants at Dearborn. Branch plants are distributed all over the world.

Ford Operations.

An idea of the complexity and vast proportions assumed by Ford operations is indicated by the fact that Ford industries are largely self-contained. The Detroit, Toledo & Ironton Railroad, a Ford holding, brings coal from Ford-owned mines in Southern Ohio and Kentucky and in turn carries completed products to the many connecting trunk line railroads. Ford steamships bring timber and iron ore from Ford-owned forests and mines in Northern Michigan and Minnesota, and return with automotive products bound for the Northwest. Virtually all materials and parts used in Ford cars, trucks and tractors are fabricated in Ford plants--steel from the iron ore, body parts from the timber, plate glass for windows and windshields, lamps for headlights, rubber tires for wheels, and even textiles for upholstery.

Comparatively few completed vehicles are turned out at the Detroit plants. Instead the parts are shipped by rail or in Ford vessels to the world-wide chain of branch plants, there to be assembled for the market. From this it may be seen that Ford efficiency is more than a mere matter of progressive production lines; it extends into every department of the business, and applies not only to the factories and offices but also to the lumber camps and the mines, the railroads and the ships that plough the seven seas.

Production and Employment.

Figures on Ford production and employment are so familiar to everyone that they need little more than a mention. More than 15,000,000 Model T Fords were manufactured and sold before the present model was brought out, to say nothing of several million tractors and trucks. It was planned to produce 2,000,000 of the new model cars in 1928. This approximates the banner year production of 2,090,959 in 1923. For a number of years Ford employment figures have hovered around the 100,000 mark, and it is probable that the new steel mills and the huge production schedules will soon push the mark up to 150,000 and possibly 200,000.

The Ford Motor Company--truly, the modern colossus of industrialism: All this great fabric of steel and stone and wood and glass, this living organism of money and matter, and men and mind, all spun out of the brain of a single man, a fragile-looking man, a dreamer . . . .

There is a spiritual quality inherent in this vast materialization of one man's dream; a quality that reveals itself in the single comment upon his achievements that Henry Ford permitted himself on the occasion of his sixty-fifth birthday: "I expect to do more in the next five years than I did in the past twenty."

Ford Airplanes.

And as Henry Ford intimated in his birthday speech, the end is not yet. The Fords interested themselves several years ago in the airplane industry. The great Ford airport at Dearborn proves the extent of that interest. At first a small plant was built for research and experimentation. Then William B. Stout developed an all-metal airplane that was commercially feasible. The Fords bought out his interest and have gone on with the work.

Henry Ford himself devotes comparatively little attention to the airplane development. Instead his son, Edsel, who is president of the Ford Motor Company, is taking a deep and personal interest in the building of airplanes and in aviation in general. In this connection should be noted his support of Commander Byrd's flight to the Antarctic. Thus it appears possible that Edsel Ford will do in the air what his father has done on the roads.

Every possible test has been made of the Ford all-metal airplanes. They have been driven hundreds of thousands of miles without accident on the Ford airlines between Detroit and Cleveland, and Detroit and Chicago. And it is the intention of the Fords greatly to extend these lines in future. The so-called Ford "flivver" plane is still in the experimental stage. This small airplane will probably be perfected in the future. So when the public is ready to use airplanes as motor cars are now used--for everyday utility--the Ford Motor Company will be ready to build the planes at low cost on a quantity production basis.

To bring the automotive story back into chronological order, it is necessary now to go back to the early days of the industry and to trace the development of the companies that sprang from the two original Michigan projects--the Olds Motor Works and the Henry Ford Automobile Company.

Subsequent Developments.

With R. E. Olds in the Olds Motor Works was associated a group of young executives which incuded Roy D. Chapin, Howard Coffin, F. C. Bezner and James J. Brady. Others connected with the company either officially or as suppliers of parts, were Henry M. Leland, the Dodges, Horace E., and John F., William E. Metzger, B. F. Everitt, J. D. Maxwell, Benjamin Briscoe, R. B. Jackson, H. T. Thomas, Charles B. Wilson, Charles B. King and Charles D. Hastings. These men all became at one time or another leaders of the automotive industry in Michigan. One group formed what later became the Chalmers Motor Corporation; another the Hudson Motor Car Company, and others the King and Columbia Motor companies. Still others individually became identified with various automobile companies, notably Charles D. Hastings, who is now chairman of the board of the Hupp Motor Car Company.

J. D. Maxwell, with William E. Metzger, W. T. Barbour and G. B. Gunderson, organized the Northern Automobile Company, which was later merged with the Wayne Auto Company, which had been formed by B. F. Everitt, to make the E. M. F. (Everitt-Metzger-Flanders) Motor Car Company. The E. M. F. was one of the first successful motor cars and helped greatly in setting the industry as a whole on its feet.

The E. M. F. company was sold, eventually to become part of the Studebaker Corporation. After this Messrs. Everitt and Metzger, with William Kelley, organized the Metzger Motor Car Company. Then the Flanders Motor Car Company was formed, with Mr. Everitt at its head, but the company soon was sold to the Maxwell. Roy D. Chapin and his associates, among them Howard Coffin, F. C. Bezner and James J. Brady, left the Olds Motor Works in 1906 and organized, with E. R. Thomas, of Buffalo, the Thomas-Detroit Motor Company, manufacturing on the site of the present Jefferson avenue plant of the Chrysler Corporation, the Thomas-Detroit car. A year later Hugh Chalmers was induced to come here from Dayton, and the name of the company was changed to the Chalmers-Detroit, also the name of the product. A short time after it was so arranged that Mr. Chalmers bought out the interests of E. R. Thomas.

Mr. Chapin, Mr. Chalmers and others of the group organized the Hudson Motor Car Company, the name of which came from that of the pioneer merchant, J. L. Hudson, who owned about 15 per cent of the stock. On January 1, 1910, Mr. Chapin and his co-workers from the Olds plants, sold out to Mr. Chalmers and acquired the Hudson plant. After concentrating on this car until 1919, they formed a separate corporation to manufacture the Essex cars, desiring to have both high and lower priced automobiles to meet the expanding market. The Hudson Motor Car Company took over the Essex in 1922, and the two cars have been built by that organization since that time.

The Leland Companies.

The Henry Ford Automobile Company and its abortive companion, the Detroit Automobile Company, both lost money; but some of the stockholders retained their enthusiasm, and joined with Henry M. Leland and his son, Wilfred, who had been making gears for both the Olds and Ford companies, to organize the Cadillac Motor Car Company. This concern made the famous "one-lung" cars that were popular for several years. Those who originally participated in 1902 in the formation of this company included William H. Murphy, A. E. F. White, Lem W. Bowen and Clarence Black. After many years of highly successful operation, during which the present eight-cylinder Cadillac car was developed, the Cadillac Motor Car Company was absorbed by the General Motors Corporation. The present plant in Detroit is one of the finest in the automotive industry.

When the Cadillac was taken over by General Motors, the Lelands remained in control for a time and then withdrew in 1917 to organize the Lincoln Motor Car Company. The Lincoln became one of the leaders in the high priced car field. In 1922, owing to financial difficulties following the war, the Lincoln Motor Car Company was absorbed by the Ford interests.

Dodge Brothers Company.

The Dodge Brothers Company had its inception in a Detroit machine shop established by the two brothers in 1901. When Henry Ford organized the Ford Motor Company in 1903, he asked them to make engines, transmissions and steering gears in quantity for the new car. This they did, and by 1910 had the largest and best equipped shop of the kind in Detroit. The Dodge brothers each took $5,000 worth of stock in the Ford Motor Company, to be paid for out of profits on parts supplied the Ford Company. In 1919, when the Fords bought out all minority stockholders, the Dodges received $27,000,000 for the 2,000 shares they had accumulated.

In 1912 the Dodges decided to build their own car, and two years later started production in a huge plant in Hamtramck. By 1917 the company had reached fourth place in volume of motor car production, and in 1920 the Dodge investment was estimated at $20,000,000, with nearly 20,000 employes. In 1926, after the deaths of the brothers, the Dodge heirs sold the company to eastern banking interests for more than $146,000,000 cash. During 1928 a consolidation was effected, whereby the Chrysler Motor Car Corporation absorbed the Dodge company.

The Packard Company.

The Packard Motor Car Company was incorporated in 1900 by J. W. and W. D. Packard at Warren, Ohio, but through the influence of Henry B. Joy, who in 1903 bought an interest and became general manager of the company, a plant was built in Detroit. In 1905 Mr. Joy became president of the concern, continuing until 1916. Capital stock is now $50,000,000, and the great plant on East Grand Boulevard is a model of modern industrial construction. Packard straight-line eights are among the most popular of high priced cars.

The Hupp Motor Car Company was organized in 1909 by R. C. Hupp and associates, and in 1915 was reincorporated as the Hupp Motor Car Corporation. Capital stock is $6,500,000, and approximately 3,000 people are employed. This company has made a world-wide reputation with its lines of medium and high priced sixes and eights.

Chrysler Development.

A complicated series of developments brought into being the present Chrysler Motor Car Corporation. The Maxwell Motor Corporation, with a plant on East Jefferson Avenue, was incorporated in 1921, with an authorized capitalization of $37,471,500. Its purpose was to effect a merger of the Maxwell Motor Company and the Chalmers Motor Corporation. Included in the assets of the Maxwell Motor Company was the Briscoe Manufacturing Company.

The Maxwell Motor Company had been originally chartered in 1912 as the Standard Motor Company, but had adopted the Maxwell name in 1913. In this year the company purchased the Flanders Motor Company, the United States Motor Company, the Maxwell-Briscoe Motor Company, the Dayton Motor Car Company, the Columbia Motor Car Company, the Brush Runabout Company, the Briscoe Manufacturing Company and several other concerns of lesser importance. Thus a whole series of combinations was brought to a head in 1921, when Walter P. Chrysler and H. Bronner bought the Maxwell at receiver's sale for the Maxwell-Chalmers Reorganization Committee.

[illegible] a [illegible]anization in 1924 under the present [illegible] Car Corporation; and the last, in [illegible] the Dodge Brothers Company. The last [illegible] put the Chrysler Corporation in a position to [illegible] General Motors and the Ford Motor Company in [illegible] manufacture and distribution of motor cars in all price ranges. The rise of the Chrysler Motor Car Corporation to its present eminence should be attributed very largely to Walter P. Chrysler, one of the greatest figures the automotive industry has yet produced.

The Graham Brothers.

An automotive concern that has recently made much progress is the Graham-Paige Motor Car Company. Incorporated in 1908 as the Paige-Detroit Motor Car Company, with an authorized capitalization of $5,000,000, the corporation was highly successful until 1926, when it was bought by the Graham brothers, who for many years had been interested in the Graham Truck division of Dodge Brothers Company, and who just prior to the sale of Dodge Brothers to eastern interests, had dominated the Dodge company policies.

General Motors Corporation.

As stated earlier, W. C. Durant combined the Buick Motor Car Company, which he helped build up in Flint during the early years of the present century, with the Olds Motor Works in 1907 to create the General Motors Company. This was the real beginning of the General Motors Corporation, although the latter name was not adopted until the reincorporation in 1916. Since that time General Motors has grown until it is considered one of the largest, if not the very largest, industrial corporation in the world. Certainly no other corporation has ever surpassed the General Motors record of production and profits during the past few years, unless it was the Ford Motor Company.

As General Motors grew, it acquired the Oakland and Cadillac Motor Car companies, and in 1918 the Chevrolet Motor Car Company. The Oakland and Chevrolet companies were organized respectively in Pontiac and Flint early in the second decade of the present century. Later developments are the Pontiac Motor Car Company, manufacturing a medium priced companion car to the Oakland, and a new division of the Cadillac Motor Car Company, manufacturing LaSalle cars, a smaller design of the Cadillac.

But passenger cars are far from being the only product of General Motors. The list has expanded until now it includes seventy-eight divisions, subsidiaries and affiliated companies, with plants in thirty-five cities of the United States and Canada. The total investment of the corporation runs above $3,000,000,000, and the products include passenger cars, trucks, tractors, many kinds of auto accessories, such as electric horns, patented roller bearings, brakes and lighting systems, spark plugs, and radiators, steering gears, auto wheels and wheel rims, and also such diverse products as farm machinery and electric refrigeration units. The Dayton-Wright Company, of Dayton, Ohio, a General Motors unit, manufactures airplanes and airplane parts. It holds several important airplane contracts with the United States government.

Fisher Body Division.

The latest important acquisition of General Motors is the Fisher Body Corporation, of Detroit, the largest of its kind in the world. The Fisher Body Company was incorporated in 1908, and the Fisher Closed Body Company in 1910, by the Fisher brothers. The two concerns were merged as the Fisher Body Corporation in the reincorporation of 1916. The Fisher Body Corporation unit of General Motors operates thirty-two plants in the United States and Canada, of which twenty-five are in Detroit. The corporation furnishes all bodies for cars of General Motors manufacture.

In 1919 General Motors started work on the great building in Detroit, now known as the General Motors Building, but which Mr. Durant hoped would be called the Durant Building. However, in 1920 Pierre S. du Pont replaced Mr. Durant as president of General Motors, marking the advent of E. I. du Pont de Nemours & Company and J. P. Morgan & Company as important factors in the corporation. The General Motors Building, and the building of the same name in New York City, are the two chief office units of the General Motors Corporation, where are housed not only the general offices of the corporation but also the offices of the General Motors Acceptance Corporation, the General Exchange Corporation, the General Motors Building Corporation and the Modern Housing Corporation.

Other Motor Companies.

In addition to the great automotive companies whose history has been briefly outlined above, a number of others were organized in Detroit, most of them now being defunct or removed to other states; and of course a number of important auto truck companies remain to be mentioned.

The Studebaker Corporation, organized in 1911, was a combination of the E. M. F. Motor Car Company and the Studebaker Brothers Manufacturing Company, of South Bend, Ind., formed to manufacture the Studebaker motor car. Offices of the corporation and the largest manufacturing units are maintained in South Bend, although two branch plants are operated in Detroit.

In 1921 Messrs. Everitt and Flanders, together with Captain "Eddie" V. Rickenbacker, organized the Rickenbacker Motor Car Company to manufacture Rickenbacker cars. This company is now inactive.

Frank L. Klingensmith, once an official of the Ford Motor Company, and Frank F. Beall a year or so later organized the Gray Motor Corporation to manufacture a light four-cylinder car. Failing to obtain a market for this car, the company has turned to the manufacture of gas-electric motor units for buses and trucks.

Auto Truck Manufacturers.

As in the passenger car field, Detroit and Michigan lead in the production of auto trucks. In Detroit are the Commerce Motor Car Company, organized in 1911, to manufacture light delivery trucks; the Denby Motor Truck Company, organized in 1915, to succeed the earlier company of the same name; the Federal Motor Truck Company, organized in 1910, to manufacture trucks both large and small; the Standard Motor Truck Company, organized in 1912, and the Acason Motor Truck Company. In Pontiac is located the General Motors Truck Company, a unit of the General Motors Corporation. In Alma, Mich., is located the Republic Truck Company, a producer of medium and heavy-weight trucks. The Packard Motor Car Company of Detroit was a large producer of Packard trucks, but discontinued the division some years ago. The Ford Motor Company produces more than 100,000 trucks each year at Dearborn. And the Chevrolet Motor Car Company, of Flint, a General Motors unit, also produces thousands of light trucks each year.

Parts and Accessory Companies.

So many thousands of motor car parts and accessory companies are included in the list of Detroit and Michigan industries that it would be impossible even to name them all within the space allotted for this chapter. And moreover, many of the large companies engaged in the general metal trades, and which were listed in a preceding chapter, devote at least a portion of their factory space to the manufacture of automotive parts and accessories. So mention of a few of the most important will have to suffice.

Continental Motors Corporation, of Detroit, largest makers exclusively of gasoline engines in the world, was organized in Chicago in 1902 by Ross W. Judson, now president of the concern, and his associates. It was first known as the Autocar Equipment Company. It was reincorporated in 1904 as the Continental Motor Manufacturing Company, and in 1916 the present name was adopted. The company moved from Chicago first to Muskegon, Mich., in search of more space and better labor conditions. When Detroit leaped into the fore as an automotive city, the chief manufacturing unit was established on East Jefferson Avenue, in Detroit, adjacent to the Hudson Motor Car Company plant, and within a few blocks of what is now the Jefferson Avenue plant of the Chrysler Motor Car Company. Capitalization is now $18,500,000, and the plants at Muskegon and Detroit cover twenty-six and one-half acres.

The Timken-Detroit Axle Company was formed in Canton, Ohio, in 1909, and soon after removed all its manufacturing units, except the steel foundry, to Detroit. It is the largest company of its kind in the world, and makes motor car and truck axles and worm gear equipment, having exclusive right to the use of Timken roller bearings.

Walter O. Briggs became identified in 1905 with B. F. Everitt in painting and trimming automobile bodies. In 1909 he obtained a controlling interest in the company, which was then reincorporated as the Briggs Manufacturing Company, of Detroit. This concern is one of the largest makers of automobile bodies.

The J. W. Murray Manufacturing Company, of Detroit, was organized in 1913 for the manufacture of automobile hoods, fenders, tanks, pans and other sheet metal parts. In 1920 this company purchased the General Spring & Wire Company, and the American Motor Castings Company. The company began automobile body building and later was merged with the Wilson Building Company, H. & M. Body Company, Dietrich, Inc., and Jenks & Muir Manufacturing Company. In 1926 the Murray Corporation of America was incorporated taking over all of these companies.

In 1928 K. L. Ames, who holds a controlling interest in the Booth Fisheries, bought the controlling stock of the corporation. On November 1, 1928, the capitalization was $222,600 preferred and $11,750,245 common. Stockholders voted on November 15 to increase the no par common from 300,000 to 900,000 shares.

The Detroit Seamless Steel Tubes Company was incorporated in 1900 to manufacture steel tubes for motor car axles, torque tubes and drive shaft housings. The capital stock is $2,000,000. Until recently Allan A. Templeton, now president of the Michigan Industrial Bank, of Detroit, was president of this company, which was formed largely by his instrumentality.

The foregoing paragraphs present an idea of the magnitude of the auto parts and accessories industry of Detroit and Michigan. At present there are approximately five hundred of these companies in the state, the number fluctuating upward to correspond with the multitudinous and ever-changing needs of the automotive industry.

But however large the proportions assumed by the automotive industry in Michigan during the present century, it still was far from representing the entire industrial growth of the state. And yet, aside from the automotive and aircraft developments, that growth has consisted mostly of further gains by industrial companies organized prior to 1900, together with additions of concerns chartered in other states and doing business in Michigan.

Industrial Statistics.

Figures prepared by the Michigan Department of State, corporation division, showing industries in Michigan paying tax in 1927 on capitalizations in excess of $50,000, indicate that since 1900 the single industrial accession of large proportions that brought its main plants and offices into the state was the Burroughs Adding Machine Company, incorporated under the Missouri law in 1909, with an authorized capital of $150,000. This statement, of course, excludes the automotive and allied industries. Smaller industries, too numerous to mention, helped in some degree to swell Michigan's rapidly increasing totals.

Productive industry in Michigan, in the year ending June 30, 1925, according to the federal census, comprised 5,600 establishments, employing 515,494 persons, who were paid $792,224,933 in wages during the year. These industrial establishments bought raw materials costing $2,466,425,886, and the value of finished products totaled $4,373,186,136.

Unofficial estimates covering the year ending June 30, 1926, showed employment in the automotive, metal and wood working industries to be 780,784 people, with a production totaling about $5,000,000,000 in value.

An idea of the accomplishments of Michigan industry in 1927, for which no accurate figures or reliable estimates are yet available, is given by the fact that for the year ending June 30, 1927, productive industrial establishments numbered 6,922. These establishments employed 864,547 people, in spite of the slight recession of prosperity that affected the state during that year.

The latest figures on Michigan agriculture available are those for the year ending June 30, 1925, as given by the federal census. In that year agricultural property in the state was valued at $1,523,977,000. Michigan crop values for that year were $269,600,000.

An unofficial estimate of the total value of Michigan farm and forest products for the year ending June 30, 1926, was approximately $2,000,000,000.

Industry and the War.

All of the first and nearly half of the second decade of the Twentieth Century was a period of rapid expansion for Detroit and Michigan industries. In this period the state seemed, all unknowing, to gird itself industrially for the world struggle soon to come--a struggle that was fought on the home front, in the counting houses and the factories, just as surely as on the fields of France.

Too much cannot be said in honor of the men who went overseas to risk their lives in defense of democracy. To them belongs the glory and the gratitude of the nation. Let there be no mistake about that. But a modicum of that honor, that glory and that gratitude belongs also to the men who made that overseas effort, the deciding factor in the war, possible on an effective scale.

At the outbreak of hostilities in 1914, Michigan had between 4,000 and 5,000 industries, capitalized at about half a billion dollars and employing more than a quarter of a million men. In 1915 the war began to make its repercussions felt industrially in the state. In this year the American Car & Foundry Company plant in Detroit was enlarged and began making shells, gun caissons and limbers and store wagons for the allied governments. The Packard Motor Car Company also began to receive large orders for trucks. In a short time nearly every factory in the state equipped to manufacture war materials received orders of one kind or another. Plant expansions became the order of the day, and the iron and copper mines were called upon for ever increasing production. Employment grew by leaps and bounds.

Declaration of War.

Then in 1917 the United States declared war. Immediately the state's vast resources of timber, iron and copper were turned to making war supplies for the American government. Not only did the state maintain and increase its lead in the production of automotive products, but other manufactures were put on a war basis. These included foundry and machine products, furniture, food products of all kinds, and especially those provided "ready to eat," leather goods, tobacco, structural materials, drugs, clothing and beet sugar.

Michigan also took an important part in the shipbuilding activities of the nation during the war. Shipyards at Detroit, Wyandotte and Ecorse on the Detroit River, and at Marine City, Port Huron, Saginaw and Benton Harbor, built ships chiefly for transfer to the trans-Atlantic service. Many Michigan-owned vessels in the ore and grain trades also were commandeered for ocean service, the largest ones being cut in two for passage through the Welland locks.

The motor car companies, of course, led the state in war production. Without exception they fulfilled one or more government contracts. Employment continued to increase at an enormous rate, and plant expansions and construction of new plants went on at a speed never before equalled in history. An idea of the vastness of this development is given by the fact that war contracts for 1917-18 in Detroit alone were estimated at $900,000,000.

As might have been expected, the Ford Motor Company was most conspicuous from the standpoint of quantity production, delivering nearly 5,000 airplane motors, 8,000 gun caissons, 8,000 trucks, 25,000 passenger cars, 6,000 ambulances, 400,000 cylinders and 700,000 bearings for Liberty motors, 2,000,000 steel helmets, and twenty-five completed Eagle boats. This company also supplied many millions of dollars worth of war materials to the allied governments.

Liberty Motors.

Perhaps the most dramatic achievement of the war industrially was the development of the Liberty airplane motor by J. G. Vincent, engineering vice-president of the Packard Motor Car Company, and E. J. Hall, of the Hall-Scott Motor Company. In five days these two men, assisted by other leading engineers of the country, designed this famous motor, using an evolution of the principles embodied in an airplane motor developed by the Packard company several years previously. The first Liberty motor was completed in the Packard shops three weeks later.

Thereafter Liberty motors were produced by the Packard Motor Car Company, the Ford Motor Company, the Cadillac Motor Car Company, and the Lincoln Motor Car Company. Production of Liberty motors, by the way, was the prime motive impelling the Lelands to establish the Lincoln company. These four companies produced over ninety per cent of all Liberty motors made in the country, and prior to the armistice production had been raised to more than 150 Liberty motors a day.

Dodge Brothers Contribution.

Another outstanding feat of war production was that of the Dodge brothers in completing and putting into operation within a period of four months a $10,000,000 munitions plant, covering eleven acres, and said to be one of the best equipped in the world. These remarkable men also put into operation within a six months' period a huge plant for the production of recoil mechanism--and they did it successfully after other great American manufacturing concerns had admitted their own inability to make the intricate mechanisms.

Late in 1917 a large contract for the manufacture of shells was offered Detroit capitalists by the United States government. Within twenty-four hours a $2,000,000 company was organized, and work was started on preparations for manufacture.

It is interesting to note that owing to the withdrawal of thousands of men from industry to serve in the expeditionary forces, women were employed to a large extent in the plants during the war period. It was estimated that approximately 50,000 women were so employed in Michigan plants, many of them being engaged in heavy machine shop and foundry work.

Back to a Peace Basis.

With the conclusion of the armistice, war contracts were cancelled, and thereafter a long delay ensued before settlements could be made with the government. This tested severely the ability of Michigan industry to adapt itself to an abrupt change in conditions. But the test was met so successfully that dislocation was brief, and indeed, outwardly was scarcely observable.

It became necessary to remodel the plants built exclusively for war production, and this was done in virtually every instance with economy and dispatch. The older plants found it comparatively easy to return to their pre-war production status. Unemployment as a result of the cancellation of government contracts proved merely temporary. Within a year after the armistice, plant extensions and new industrial construction in the state exceeded $10,000,000, and during that same year labor shortages occurred in Detroit and some of the other industrial cities.

In 1921 and 1922 the state experienced an unsettled condition of trade, with accompanying financial depression and some unemployment. This was undoubtedly due in considerable measure to over-expansion, commercially and industrially, caused by the optimism resulting from the successful conclusion of the war. But in 1923 the climb back to normalcy was started, and continued until 1928, when prosperity returned to Michigan in full force. Proof of this is offered by the fact that the middle of the year saw employment figures in Detroit and throughout the state generally reach totals never before equalled.

The Motor Vehicle Manufacturers Association, Inc., in Detroit prepares weekly, monthly, and annual statistics on vehicle production from U.S. plants. Their annual reports include a host of other data, among them production figures for Canadian plants. Their figures on world production are shown in Table XVI-1. *Automotive News* and *Ward's Automotive Reports* are Detroit-based trade publications that should be consulted by persons requiring details on the week-to-week operations of vehicle manufacturers. *Automotive Industries* (a monthly from Radnor, Pennsylvania) carries articles and news items on industry technology.

R. L. Polk & Company provides data on registrations as a subscription service. Tables XVI-12 and XVI-13 were developed from that source.

The companies themselves have cooperated with the Division of Research, Graduate School of Business Administration, Michigan State University, in providing employment figures for Michigan and the United States and production figures for plants located in Michigan. Their cooperation in this program is gratefully acknowledged. Tables XVI-2 and XVI-5 were tabulated from company data. General Motors also issues annual press releases for selected locations (Tables XVI-6 and XVI-7). No releases are issued for Detroit or Warren because of many people on temporary assignment there and on payrolls elsewhere, or vice versa.

The Recreational Vehicle Industry Association is the source of Table XVI-11; the Bureau of the Census of Table XVI-8.

In 1965, Canada and the United States agreed to allow manufacturers of motor vehicles (essentially General Motors, Ford, Chrysler, American Motors, and the large truck manufacturers) to ship components and completed vehicles across the border, duty free, subject to certain restrictions. There has been a burgeoning trade between the two countries, as reflected in Tables XVI-9 and XVI-10. The very rapid increase in the volume of exports from Michigan is largely a result of Autopact (see Tables XXIV-1 and XXIV-2 in the chapter on international trade).

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TABLE XVI-2. PRODUCTION OF MOTOR VEHICLES IN MICHIGAN, BY PLANT, AND IN THE UNITED STATES: 1974-1980

	1974	1975	1976	1977	1978	1979	1980
Dearborn, Ford	292,633	165,854	159,503	141,768	232,326	344,135	241,502
Detroit, Cadillac	195,400	247,082	256,298	279,170	291,168	261,515	115,424
Detroit, Chevrolet[a]	12,085	13,289	31,155	31,547	38,059	27,260	19,755
Detroit, Chrysler, Jefferson Avenue[b]	123,605	87,922	88,605	94,483	45,001	--	69,089
Detroit, Chrysler, Jefferson Avenue T[b]	--	--	--	--	22,856	64,330	10,403
Detroit, Chrysler, Lynch Road	191,681	138,240	178,847	184,488	133,470	109,007	47,507
Flint, Buick	208,141	305,406	391,732	393,045	382,771	372,676	260,161
Flint, Chevrolet	302,068	306,459	426,164	394,952	432,238	346,447	171,152
Hamtramck, Chrysler	424,509	258,146	471,815	338,226	253,681	153,186	1,031
Kalamazoo, Checker	5,183	3,181	4,792	4,777	4,225	4,766	3,197
Lansing, Diamond Reo[c]	9,136	543	--	--	--	--	--
Lansing, Duplex[c]	307	225	--	--	--	--	--
Lansing, Oldsmobile	271,400	322,412	399,409	380,958	382,514	492,834	329,607
Pontiac, Pontiac	171,925	171,264	288,667	308,984	306,756	285,349	146,984
Pontiac, GMC	159,991	105,437	96,543	135,220	256,749	244,829	101,352
Warren, Chrysler	248,343	202,525	304,730	329,215	327,422	149,308	77,182
Wayne, Ford	188,201	236,247	279,098	278,329	271,662	160,123	157,134
Wayne, Ford truck	165,253	128,830	171,292	186,012	210,676	163,607	66,358
Wixom, Ford	116,404	126,650	149,379	190,572	173,964	140,096	50,927
Ypsilanti, GMAD	214,167	189,010	247,061	257,550	230,022	258,232	312,938
TOTAL, car, Michigan	2,403,249	2,251,414	2,914,242	2,852,350	2,707,560	2,581,919	1,535,501
TOTAL, truck, Michigan	897,183	757,308	1,029,884	1,076,946	1,288,000	995,781	446,202
TOTAL, car, U.S.	7,324,504	6,716,951	8,497,893	9,213,654	9,176,635	8,433,662	6,375,516
TOTAL, truck, U.S.	2,746,538	2,269,562	2,999,703	3,489,128	3,722,567	3,046,331	1,632,826

SOURCE: The various companies.

a. Chevrolet Division began assembling trucks here in 1974.

b. Converted from car to truck production for the 1978 model year. Car production resumed August, 1981.

c. Production ceased in 1975.

TABLE XVI-3. WHERE DOMESTIC PASSENGER CARS WERE BUILT: 1981 MODELS

Place	Models
United States	
	American Motors
Kenosha, Wisconsin	Eagle, Concord, Spirit
	Chrysler Corporation
Belvidere, Illinois	Omni, Horizon
Detroit, Michigan, Jefferson Avenue	Aries, Reliant
Detroit, Michigan, Lynch Road	Chrysler, Plymouth
Newark, Delaware	Aries, Reliant
St. Louis, Missouri	LeBaron, Diplomat, Caravelle
	Ford Motor Company
Atlanta, Georgia	Granada, Cougar, Zephyr, Fairmont
Chicago, Illinois	Granada, Cougar
Dearborn, Michigan	Mustang, Capri
Kansas City, Missouri	Fairmont, Zephyr
Lorain, Ohio	Thunderbird
Louisville, Kentucky	Ford (LTD)
Metuchen, New Jersey	Escort, Lynx
St. Louis, Missouri	Mercury
San Jose, California	Mustang, Capri
Wayne, Michigan	Escort, Lynx
Wixom, Michigan	Lincoln, Mark VI
	General Motors
Arlington, Texas	Malibu, Monte Carlo, Cutlass
Baltimore, Maryland	Malibu, Monte Carlo, LeMans
Detroit, Michigan	Cadilac
Doraville, Georgia	Malibu, Monte Carlo, Cutlass
Fairfax, Kansas	Pontiac, Oldsmobile, Buick
Flint, Michigan	LeSabre, Electra, Century, Regal
Framingham, Mass.	Century, Cutlass, Regal
Fremont, California	Malibu, Monte Carlo, Century, Regal
Janesville, Wisconsin	Chevrolet
Lakewood, Georgia	Chevette, T-1000
Lansing, Michigan	Cutlass, Delta 88,98
Leeds, Missouri	Malibu, Monte Carlo
Linden, New Jersey	Riviera, Toronado, Eldorado, Seville
Lordstown, Ohio	Cavalier, J-2000
Norwood, Ohio	Camaro, Firebird

TABLE XVI-3. WHERE DOMESTIC PASSENGER CARS WERE BUILT: 1981 MODELS (cont.)

Place	Models
	General Motors (cont.)
Oklahoma City, Oklahoma	Citation, Phoenix
Pontiac, Michigan	Pontiac, LeMans, Grand Prix
St. Louis, Missouri	Chevrolet, Corvette
South Gate, California	(April 1981) Cavalier, Cimarron
Tarrytown, New York	Skylark, Phoenix, Citation
Van Nuys, California	Camaro, Firebird
Willow Run, Michigan	Omega, Skylark, Citation
Wilmington, Delaware	Chevette, T-1000
	Volkswagen of America
Westmoreland, Pennsylvania	Rabbit
	Checker Motors
Kalamazoo, Michigan	Checker
Canada	
	American Motors
Brampton, Ontario	Eagle, Concord
	Chrysler Corporation
Windsor, Ontario	Cordoba, Mirada, Imperial
	Ford Motor Company
Oakville, Ontario	Ford,
St. Thomas, Ontario	EXP, LN-7
	General Motors
Oshawa, Ontario	Chevrolet, Monte Carlo, Malibu, Pontiac, LeMans
St. Therese, Quebec	Cutlass, Grand Prix
	Volvo
Halifax, Nova Scotia	Volvo

SOURCE: Automotive News, 1980 Market Data Book Issue, 30 April 1981, p. 25.

NOTE: General Motors Assembly Division controls all GM plants except for the four home plants at Flint, Detroit, Pontiac, and Lansing for Buick, Cadillac, Pontiac, and Oldsmobile.

TABLE XVI-4. WHERE DOMESTIC TRUCKS WERE BUILT: 1981 MODELS

Place	Models
United States	
	General Motors
Baltimore, Maryland	light Chevrolet and GMC trucks
Detroit, Michigan	light Chevrolet and GMC trucks
Flint, Michigan	light Chevrolet and GMC trucks, sport utility vehicles
Fremont, California	light Chevrolet and GMC trucks
Janesville, Wisconsin	light Chevrolet and GMC trucks
Lordstown, Ohio	Chevrolet and GMC vans
Pontiac, Michigan	light, medium and heavy Chevrolet and GMC trucks, buses
St. Louis, Missouri	light Chevrolet and GMC trucks
	Chrysler Corporation
Warren, Michigan	light Dodge trucks, sport utility vehicles
	Ford Motor Company
Kansas City, Missouri	light trucks, supercab
Louisville, Kentucky	light, medium, heavy, and extra heavy trucks
Lorain, Ohio	vans
Wayne, Michigan	light trucks, Bronco
Norfolk, Virginia	light trucks
Avon Lake, Ohio	vans
San Jose, California	light trucks
Twin cities, Minnesota	light trucks
	International
Fort Wayne, Indiana	heavy trucks
Springfield, Ohio	medium and medium heavy trucks, buses
Wagner, Oklahoma	heavy trucks[a]
	Mack
Allentown, Pennsylvania	heavy Mack trucks
Hayward, California	heavy Mack trucks
Macungie, Pennsylvania	heavy Mack trucks

TABLE XVI-4. WHERE DOMESTIC TRUCKS WERE BUILT: 1981 MODELS (cont.)

Place	Models
	Jeep
Toledo, Ohio	light trucks, jeep vehicles
	AM General Corporation
South Bend, Indiana	military and postal vehicles
	Volkswagon of America
Westmoreland, Pennsylvania	light trucks[b]
Canada	
	Chrysler Corporation
Windsor, Ontario	vans
	Ford Motor Company
Oakville, Ontario	light and medium trucks
	General Motors
Oshawa, Ontario	light trucks
Scarborough, Ontario	vans
London, Ontario	buses
	International
Chatham, Ontario	medium trucks, buses
Vancouver, British Columbia	heavy trucks, off-highway trucks
	Mack
Oakville, Ontario	heavy trucks

SOURCE: Automotive News, 1981 Market Data Book Issue, 30 April 1980, p. 25.

a. Beginning January 1981.

b. Beginning 29October 1980.

TABLE XVI-1. WORLD PRODUCTION OF MOTOR VEHICLES, BY COUNTRY: 1955-1980

Year	United States	Canada	Japan	France	Germany	Italy	United Kingdom	Russia	Spain
1955	9,204,049	452,114	68,932	725,061	908,702	268,766	1,237,068	445,268	3,972
1956	6,918,759	471,350	111,066	827,079	1,075,603	315,802	1,004,544	464,632	4,500
1957	7,220,431	413,577	181,977	927,956	1,202,206	351,815	1,149,095	495,408	30,436
1958	5,121,269	356,418	188,303	1,127,549	1,495,221	403,560	1,364,407	511,074	31,050
1959	6,723,588	367,939	262,814	1,283,159	1,718,544	500,784	1,560,427	494,994	56,800
1960	7,905,117	397,739	481,551	1,369,210	2,055,127	644,633	1,810,700	523,591	58,209
1961	6,652,938	386,923	813,870	1,244,223	2,146,797	759,140	1,464,134	555,330	75,000
1962	8,197,311	505,187	990,706	1,536,133	2,356,594	946,793	1,674,530	577,500	100,163
1963	9,108,776	631,356	1,283,531	1,736,977	2,667,896	1,180,536	2,011,720	587,012	131,988
1964	9,307,860	670,990	1,702,475	1,615,896	2,909,657	1,090,078	2,332,376	603,100	178,128
1965	11,137,830	846,609	1,875,614	1,641,696	2,976,477	1,175,548	2,177,261	616,000	228,935
1966	10,396,299	872,214	2,286,399	2,024,552	3,050,708	1,365,898	2,042,354	675,300	340,418
1967	9,023,736	919,508	3,146,486	2,009,672	2,482,319	1,542,669	1,937,119	728,800	361,637
1968	10,820,410	1,150,218	4,085,826	2,075,617	3,106,958	1,660,370	2,225,122	800,700	393,433
1969	10,205,911	1,326,478	4,674,923	2,459,072	3,604,565	1,595,951	2,182,793	844,300	454,571
1970	8,283,949	1,159,504	5,289,147	2,750,086	3,842,247	1,854,252	2,098,498	922,000	536,026
1971	10,671,654	1,346,765	5,810,774	3,010,294	3,982,722	1,817,019	2,198,146	1,142,700	532,358
1972	11,310,708	1,430,084	6,294,438	3,328,320	3,815,982	1,839,793	2,329,430	1,379,000	695,217
1973	12,681,513	1,574,820	7,082,757	3,596,179	3,949,065	1,957,994	2,163,941	1,602,000	822,020
1974	10,072,662	1,524,874	6,551,840	3,462,847	3,099,777	1,772,515	1,936,685	1,846,000	837,414
1975	8,986,605	1,424,006	6,941,591	2,861,305	3,186,208	1,458,629	1,648,399	1,964,000	814,164
1976	11,497,391	1,640,112	7,841,447	3,402,715	3,868,089	1,590,677	1,705,506	2,025,000	866,240
1977	12,702,782	1,775,445	8,514,522	3,507,881	4,104,216	1,583,917	1,714,240	2,080,000	1,129,700
1978	12,899,202	1,817,457	9,269,153	3,507,930	4,186,364	1,656,115	1,607,467	2,160,000	1,143,831
1979	11,479,993	1,631,661	9,635,546	3,613,458	4,249,743	1,632,280	1,478,512	2,173,000	1,122,918
1980	8,019,841	1,374,329	11,042,884	3,378,433	3,878,415	1,611,856	1,312,914	2,197,000	1,181,659

TABLE XVI-1. WORLD PRODUCTION OF MOTOR VEHICLES, BY COUNTRY: 1955-1980 (cont.)

Year	Poland	Belgium	Sweden	Yugo- slavia	East Germany	Czecho- slovakia	Nether- lands	Hungary	Austria	World
1955	17,000	1,625	50,299	--	36,438	24,183	--	--	18,080	13,742,690
1956	19,000	383	57,274	4,200	45,346	37,329	--	3,500	15,935	11,652,001
1957	21,000	320	71,654	7,200	51,078	48,359	--	4,000	13,910	12,528,380
1958	27,000	382	91,179	7,696	54,163	58,556	1,586	5,200	19,166	11,354,337
1959	34,500	343	112,394	8,658	67,341	66,662	6,812	4,900	20,187	13,870,486
1960	36,400	256	128,527	15,921	76,000	73,684	19,339	5,600	12,568	16,376,878
1961	35,990	800	131,755	21,254	84,200	77,053	18,592	6,400	13,484	15,209,493
1962	41,129	1,043	151,568	21,197	88,000	81,224	28,577	7,700	12,395	18,198,265
1963	48,388	1,200	167,850	28,898	94,000	70,781	22,362	6,000	10,078	20,711,023
1964	54,853	2,070	184,018	38,692	102,000	55,468	36,182	8,000	7,660	22,014,424
1965	59,800	166,594	205,717	45,452	118,056	90,713	36,047	7,131	5,044	24,542,083
1966	66,975	195,219	199,910	48,834	126,626	113,421	39,993	7,990	4,210	24,975,313
1967	68,359	183,087	214,560	55,641	134,101	133,174	56,749	8,250	3,729	24,167,203
1968	84,921	172,906	244,786	74,106	139,116	150,299	66,523	8,500	4,088	28,576,465
1969	101,800	302,549	271,440	94,983	147,680	158,582	71,659	9,000	5,417	39,029,284
1970	118,000	272,433	310,887	130,563	181,000	169,920	79,219	9,200	3,937	29,686,562
1971	145,700	295,764	317,295	132,368	158,000	176,862	91,312	9,500	6,878	33,681,561
1972	156,100	271,453	305,989	126,412	173,800	182,937	99,666	10,000	6,255	35,796,305
1973	190,400	298,957	378,042	143,826	175,000	197,805	107,452	10,500	6,278	39,159,751
1974	200,878	183,128	368,359	189,728	192,000	200,878	82,081	12,075	4,642	35,053,084
1975	258,300	222,176	366,753	205,567	200,000	211,073	72,098	12,100	7,699	33,265,240
1976	310,400	326,978	367,780	216,071	205,000	215,830	86,561	12,900	8,739	38,534,623
1977	374,000	336,382	286,901	257,762	209,000	198,571	87,853	13,313	8,177	41,120,011
1978	417,500	303,260	305,534	279,759	207,000	218,568	86,323	13,000	5,486	42,490,198
1979	433,400	314,997	354,820	315,110	210,000	213,787	106,850	13,814	9,376	41,709,351
1980	417,834	259,966	298,400	283,744	213,600	233,912	96,435	16,315	364,109	38,642,571

SOURCE: Motor Vehicle Manufacturers Association of the United States, World Motor Vehicle Data (Detroit: 1980), pp. 14-17; MVMA Motor Vehicle, Facts and Figures (Detroit: 1981), p. 7.

TABLE XVI-5. QUARTERLY TOTAL EMPLOYMENT BY CHRYSLER, FORD, AND GENERAL MOTORS IN MICHIGAN AND THE UNITED STATES: 1973-1980

(Average of three monthly figures)

Year	Chrysler		Ford[a]		General Motors	
	Michigan	United States	Michigan	United States	Michigan	United States
1973: 1	91,125	148,485	119,150	221,559	262,512	589,229
2	93,084	154,676	122,002	226,463	262,963	590,622
3	88,316	146,280	121,049	221,661	252,975	572,229
4	97,411	161,253	127,154	230,786	265,636	605,514
1974: 1	88,080	147,376	119,788	215,671	222,908	513,221
2	84,610	139,538	117,732	214,706	221,884	510,354
3	84,393	139,005	117,857	213,975	219,809	498,105
4	69,423	117,560	117,354	213,870	243,364	549,470
1975: 1	43,632	76,687	95,721	168,634	200,406	448,721
2	59,559	99,410	104,935	190,290	210,586	474,983
3	69,545	114,654	108,117	195,703	212,095	471,185
4	73,691	122,455	108,795	195,459	233,000	525,000
1976: 1	74,086	122,281	109,767	199,711	224,000	505,000
2	79,120	127,762	111,225	202,085	242,000	544,000
3	81,087	129,539	108,576	196,799	233,000	523,000
4	82,694	135,322	114,220	207,716	256,000	574,000
1977: 1	78,225	127,420	112,218	216,631	245,000	545,000
2	83,490	135,089	117,818	223,031	265,000	586,000
3	82,701	135,039	118,775	222,119	252,000	564,000
4	84,047	137,286	124,098	233,911	280,000	624,000
1978: 1	78,744	131,066	124,187	234,635	264,000	588,000
2	82,799	136,158	127,148	239,517	278,000	619,000
3	75,187	125,989	126,300	233,314	267,000	594,000
4	81,664	135,997	135,377	2[illegible]3,536	289,000	643,000
1979: 1	75,316	125,899	132,298	245,253	295,000	644,000
2	70,238	118,532	129,526	240,054	296,000	650,000
3	58,182	99,754	117,630	211,763	291,000	582,000
4	55,456	98,228	111,790	196,038	288,000	602,000
1980: 1	47,273	86,341	104,321	181,595	267,000	56[illegible],000
2	43,235	78,908	92,458	160,226	237,000	499,000
3	40,733	73,248	86,528	144,068	220,000	469,000
4	44,452	80,321	100,033	172,827	253,000	538,000

SOURCE: Data made available by the automobile companies.
a. Excludes Aeronutronic Ford and finance and insurance subsidiaries.
n.a.: not available.

TABLE XVI-6. GENERAL MOTORS LOCAL PURCHASES, PAYROLLS, AND EMPLOYMENT IN GM'S NORTHERN MICHIGAN REGION: 1967-1981

(In thousands of dollars)

Plant City	Year	Employees^{a}	Earnings^{b}	Number of local suppliers	Local purchases
Bay City	1967	2,694	$ 22,209	200	$ 4,500
	1968	3,007	29,292	360	7,011
	1969	3,440	31,797	391	5,759
	1970	2,750	27,314	381	5,794
	1971	3,651	41,041	433	6,240
	1972	3,596	41,565	462	6,300
	1973	3,824	48,313	475	7,400
	1974	3,423	46,538	475	9,830
	1975	3,006	46,663	387	5,720
	1976	3,586	65,950	477	10,740
	1977	3,805	79,979	471	13,254
	1978	3,868	88,330	475	14,900
	1979	3,598	79,917	440	16,000
	1980^{p}	2,500	63,700	381	11,300
	1981^{p}	2,581	74,400	n.a.	n.a.
Flint	1967	72,649	663,377	7,600	388,000
	1968	74,865	767,758	7,534	324,240
	1969	76,741	790,489	7,800	344,892
	1970	60,526	660,303	7,083	252,100
	1971	69,521	845,338	7,000	286,000
	1972	68,889	925,325	7,000	310,000
	1973	73,946	1,083,576	7,100	429,000
	1974	63,180	962,027	6,103	412,000
	1975	59,572	1,014,131	6,347	479,600
	1976	67,347	1,422,169	6,846	598,729
	1977	73,562	1,715,752	7,468	696,111
	1978	76,933	1,865,837	7,360	748,500
	1979	75,981	1,926,009	7,548	859,600
	1980^{p}	62,200	1,700,000	n.a.	739,300
	1981^{p}	65,738	1,800,000	n.a.	n.a.
Grand Rapids	1967	6,666	58,161	1,000	8,809
	1968	6,828	67,847	998	10,361
	1969	6,948	69,860	1,100	11,000
	1970	5,783	63,844	1,000	12,984
	1971	6,916	80,266	900	8,390
	1972	6,908	87,857	900	8,600
	1973	7,417	104,622	950	10,400
	1974	6,636	100,954	950	14,800
	1975	6,030	97,383	914	19,812
	1976	6,862	133,658	989	13,941
	1977	7,353	156,518	1,004	13,880
	1978	7,652	173,752	1,018	28,800
	1979	8,169	203,694	1,180	29,900
	1980^{p}	7,400	182,400	1,200	43,000
	1981^{p}	8,143	222,000	n.a.	n.a.

TABLE XVI-6. GENERAL MOTORS LOCAL PURCHASES, PAYROLLS, AND EMPLOYMENT IN GM'S NORTHERN MICHIGAN REGION: 1967-1981 (cont.)

(In thousands of dollars)

Plant City	Year	Employees[a]	Earnings[b]	Number of local suppliers	Local purchases
Kalamazoo	1967	2,055	$ 21,249	405	$ 6,538
	1968	2,484	29,138	415	8,219
	1969	2,718	30,975	400	9,725
	1970	2,539	32,715	400	1,300
	1971	2,833	34,782	340	1,400
	1972	2,768	37,480	300	1,600
	1973	3,099	46,037	325	2,300
	1974	2,716	42,345	382	2,400
	1975	2,682	48,998	361	2,120
	1976	3,244	69,902	341	3,662
	1977	3,668	83,858	375	6,471
	1978	3,725	86,952	300	3,598
	1979	3,831	97,967	340	4,619
	1980[p]	2,666	75,200	300	5,300
	1981[p]	2,763	103,000	n.a.	n.a.
Lansing	1967	19,357	171,977	2,250	114,000
	1968	20,599	212,128	2,732	131,075
	1969	21,237	221,200	3,000	139,719
	1970	17,194	181,503	2,500	122,600
	1971	21,777	273,967	1,000	111,600
	1972	21,004	290,739	1,000	112,800
	1973	21,808	332,922	1,100	130,800
	1974	16,841	250,076	1,335	82,600
	1975	16,928	287,412	2,588	93,700
	1976	18,796	399,658	1,319	111,677
	1977	20,558	471,868	1,487	147,711
	1978	22,225	525,835	1,646	201,300
	1979	23,432	583,343	1,796	239,641
	1980[p]	20,500	525,300	1,500	202,900
	1981[p]	22,793	682,000	n.a.	n.a.
Saginaw	1967	18,642	171,154	1,900	62,569
	1968	19,456	204,854	1,954	68,958
	1969	20,907	218,820	1,900	68,958
	1970	18,384	200,965	2,032	71,000
	1971	23,284	293,209	2,000	119,000
	1972	23,384	318,677	2,000	112,000
	1973	24,565	379,148	2,000	140,700
	1974	22,266	336,584	1,800	148,400
	1975	19,969	343,241	1,245	91,700
	1976	22,661	472,011	1,833	112,748
	1977	24,307	565,624	2,013	146,289
	1978	25,765	631,277	2,147	168,289
	1979	26,127	642,468	2,276	183,069
	1980[p]	19,500	527,000	2,100	146,000
	1981[p]	20,755	617,000	n.a.	n.a.
Three Rivers	1980[p]	1,055	29,000	68	1,400
	1981[p]	1,840	52,000	n.a.	n.a.

TABLE XVI-6. GENERAL MOTORS LOCAL PURCHASES, PAYROLLS, AND EMPLOYMENT IN GM'S NORTHERN MICHIGAN REGION: 1967-1981 (cont.)

(In thousands of dollars)

Plant City	Year	Employees[a]	Earnings[b]	Number of local suppliers	Local purchases
TOTALS	1967	122,063	$1,108,127	13,355	$ 584,416
	1968	127,239	1,311,017	13,993	549,864
	1969	131,991	1,364,141	14,591	580,053
	1970	107,176	1,166,645	13,396	465,668
	1971	127,982	1,568,604	11,673	532,630
	1972	126,549	1,701,643	11,662	561,300
	1973	134,659	1,994,618	11,950	720,600
	1974	115,062	1,738,525	11,045	670,030
	1975	108,187	1,837,828	11,842	692,652
	1976	122,496	2,563,347	11,805	851,497
	1977	133,253	3,073,600	12,818	1,023,716
	1978	140,168	3,371,982	12,946	1,165,387
	1979	141,138	3,533,398	13,580	1,332,830
	1980[p]	116,500	3,102,600	n.a.	1,149,200
	1981[p]	124,613	3,550,400	n.a.	n.a.

SOURCE: General Motors Corporation, special release.

a Geographical payroll reports files, annual averages of monthly wage and salary jobs at GM facilities in these areas.

b. Geographical payroll reports files, does not include health insurance, pension contributions, supplemental unemployment benefits, unemployment insurance, and workmen's compensation.

p. preliminary

n.a. not available

TABLE XVI-7. GENERAL MOTORS LOCAL PURCHASES, PAYROLLS, AND EMPLOYMENT IN GM'S SOUTHERN MICHIGAN REGION: 1970-1981

(Thousands of dollars)

Year	Employees[a]	Earnings[b]	Purchases
Adrian-Tecumseh			
1970	719	6,759	126
1971	832	8,800	126
1972	858	11,441	125
1973	981	13,822	135
1974	766	10,248	153
1975	825	13,707	152
1976	1,083	21,000	318
1977	1,255	26,300	1,400
1978	1,427	26,300	9,500
1979	1,44	33,800	12,600
1981[p]	1,618	45,000	n.a.
Livonia			
1970	5,692	55,928	53,500
1971	7,094	80,726	87,417
1972	7,461	92,706	91,000
1973	8,362	116,900	85,400
1974	6,441	92,600	123,200
1975	6,444	99,900	96,000
1976	8,188	149,200	149,100
1977	8,713	171,400	164,600
1978	8,808	180,800	20,500
1979	8,720	195,600	232,000
1980[p]	6,240	148,200	128,600
1981[p]	7,109	197,000	n.a.
Milford[c]			
1970	1,150	13,000	829
1971	1,200	15,700	1,060
1972	1,415	20,000	1,150
1973	1,644	24,200	1,280
1974	1,727	26,300	2,150
1975	1,700[d]	25,435	2,450
1976	2,175	41,900	5,500
1977	2,386	48,200	4,000
1978	2,256	53,400	5,700
1979	2,790	74,500	10,800
1980[p]	2,685	73,700	10,100
1981[p]	2,609	79,000	n.a.
Pontiac			
1970	29,799	309,283	98,000
1971	33,904	414,754	98,399
1972	35,764	463,803	89,700
1973	38,343	540,902	106,740
1974	29,831	438,809	92,155
1975	25,238	410,200	84,200
1976	31,367	625,700	117,300
1977	33,220	733,900	161,700
1978	37,212	849,300	150,200
1979	39,200	926,700	179,300
1980[p]	30,500	777,700	186,100
1981[p]	27,704	824,000	n.a.

TABLE XVI-7. GENERAL MOTORS LOCAL PURCHASES, PAYROLLS, AND EMPLOYMENT IN GM'S SOUTHERN MICHIGAN REGION: 1970-1981 (cont.)

(Thousands of dollars)

Year	Employees[a]	Earnings[b]	Purchases
Ypsilanti			
1970	8,909	93,489	47,700
1971	10,996	133,665	64,905
1972	11,748	153,337	84,200
1973	12,333	178,337	97,500
1974	9,876	148,251	93,500
1975	9,710	154,525	91,900
1976	12,352	238,700	97,700
1977	14,691	300,900	139,300
1978	15,303	357,300	187,600
1979	18,446	459,400	507,600
1980[p]	17,270	460,100	554,400
1981[p]	15,854	448,000	n.a.

SOURCE: General Motors Corporation, special release.

NOTE: Separate figures are not available for the cities of Detroit and Warren because of the large number of people on temporary assignment, on the payroll of divisions scattered around the world.

a. Annual averages of monthly wage and salary jobs at GM facilities.

b. Does not include health insurance, pension contributions, supplemental unemployment benefits, unemployment insurance, and other fringe benefits.

c. For 1970-1975, figures pertain to permanent employees of the proving grounds. For 1976-1979, figures are estimates that include permanent employees and personnel from other divisions on temporary assignment.

d. Estimated.

p. preliminary.

TABLE XVI-8. VALUE OF OUTPUT FROM AND NEW INVESTMENT IN FACTORIES CLASSIFIED IN THE MOTOR VEHICLES AND CAR BODIES, MOTOR VEHICLE PARTS AND ACCESSORIES, AND AUTOMOTIVE STAMPINGS INDUSTRIES IN MICHIGAN AND THE UNITED STATES: 1972-1978

	Value added in manufacturing			New capital expenditures		
Year	Michigan (0000)	United States (0000)	Michigan as a percentage of U.S.	Michigan (000)	United States (000)	Michigan as a percentage of U.S.
			Motor vehicles and car bodies			
1972	4,475.4	11,782.5	38.0	651.8	917.2	71.1
1973	5,442.4	13,666.0	39.8	537.0	805.9	66.6
1974	3,971.2	10,849.4	36.6	673.6	1,042.9	64.6
1975	4,191.9	10,441.0	40.1	432.4	655.7	65.9
1976	6,457.5	15,843.7	40.8	826.7	1,046.9	79.0
1977	7,198.6	18,723.7	38.4	(D)	1,706.1	(D)
1978	7,631.1	20,490.6	37.2	(D)	1,876.9	(D)
			Motor vehicle parts and accessories			
1972	3,802.2	9,164.7	41.5	498.9	1,113.1	44.8
1973	4,394.7	10,641.3	41.3	432.6	1,033.6	41.9
1974	3,710.8	10,250.0	36.2	748.6	1,290.1	58.0
1975	3,817.1	9,986.3	38.2	561.6	1,114.4	50.4
1976	5,267.5	13,709.4	38.4	379.4	962.1	39.4
1977	6,259.8	16,263.8	38.5	792.1	1,833.2	43.2
1978	6,996.9	18,377.0	38.1	1,088.5	2,457.8	44.3
			Automotive stampings			
1972	1,157.1	2,663.8	43.4	(D)	117.5	(D)
1973	1,371.8	3,141.3	43.7	(D)	171.5	(D)
1974	1,364.6	3,011.6	45.3	(D)	255.5	(D)
1975	1,229.4	2,872.4	42.8	(D)	215.5	(D)
1976	1,743.8	3,934.8	44.3	(D)	176.1	(D)
1977	1,947.6	4,654.5	41.8	104.0	292.2	35.6
1978	2,186.6	5,180.1	42.2	201.2	401.4	50.3

SOURCE: Bureau of the Census, *1977 Census of Manufactures, Geographic Area Series, Michigan* (Washington, D.C.: 1979), Preliminary Report MC77-A23 (P), Table 3; Bureau of the Census, *1977 Census of Manufactures, Summary Series, Selected Statistics for Industry Groups and Industries: 1977 and 1972* (Washington, D.C.: 1979), MC77-S-1(P), Table 2; Bureau of the Census, *1978 Annual Survey of Manufactures, Statistics for States, Standard Metropolitan Statistical Areas, Large Industrial Counties, and Selected Cities*, M78(AS)-6 and *Statistics for Industry Groups and Industries*, M78(AS)-1 (Washington D.C.: 1981), Tables 2(Michigan) and 2(United States).

(D): Withheld to avoid disclosing data for individual companies.

TABLE XVI-9. FACTORY SALES OF MOTOR VEHICLES FROM CANADIAN AND U.S. PLANTS, BY CANADIAN, U.S., AND OTHER DESTINATIONS: 1965-1980

	Plants in United States				Plants in Canada				
Year	Exports to Canada	Other exports	Domestic	Total	Exports to U.S.	Other exports	Domestic	Total	U.S.-Canada total
					Passenger cars				
1965	46,540	159,123	9,120,737	9,326,400	33,862	39,771	630,604	704,237	10,030,637
1966	121,821	139,625	8,336,880	8,598,326	161,068	36,796	494,027	691,891	9,290,217
1967	246,140	120,460	7,070,164	7,436,764	326,139	34,829	354,822	715,790	8,152,554
1968	288,610	126,399	8,407,149	8,822,158	480,254	36,830	359,195	876,279	9,698,437
1969	286,392	130,847	7,806,476	8,223,715	676,765	35,948	314,890	1,027,603	9,251,318
1970	245,746	113,753	6,187,318	6,546,817	681,872	30,427	206,933	919,232	7,466,049
1971	352,130	110,748	8,121,714	8,584,592	779,769	37,654	258,034	1,075,457	9,660,049
1972	382,463	89,005	8,352,470	8,823,928	836,630	37,293	262,971	1,136,894	9,960,832
1973	476,099	102,699	9,078,849	9,657,647	862,407	41,126	322,506	1,226,039	10,883,686
1974	500,463	109,499	6,721,294	7,331,256	802,370	52,495	316,978	1,171,843	8,503,099
1975	549,353	90,199	6,073,300	6,712,852	713,407	58,149	271,689	1,043,245	7,756,097
1976	562,635	97,167	7,837,801	8,497,603	808,788	75,331	250,525	1,134,644	9,632,247
1977	586,073	102,308	8,512,468	9,200,849	831,994	87,148	236,559	1,155,701	10,356,550
1978	541,552	130,075	8,493,563	9,165,190	764,835	107,037	155,701	1,127,573	10,292,763
1979	582,097	158,991	7,678,138	8,419,226	582,386	92,728	298,060	973,174	9,392,400
1980	488,857	70,864	5,840,305	6,400,026	539,239	86,297	201,588	827,124	7,227,150
					Trucks and buses				
1965	9,550	126,311	1,615,944	1,751,805	7,001	15,525	119,138	141,664	1,893,469
1966	19,525	105,033	1,606,526	1,731,084	58,111	23,485	113,718	195,314	1,926,398
1967	35,199	89,825	1,414,438	1,539,462	98,029	26,999	100,932	225,960	1,765,422
1968	47,559	83,428	1,765,091	1,896,078	145,258	31,316	100,160	276,734	2,172,812
1969	60,251	81,745	1,781,177	1,923,179	197,551	30,318	87,300	315,169	2,238,348
1970	53,646	73,125	1,565,669	1,692,440	157,532	32,429	62,118	252,079	1,944,519

TABLE XVI-9. FACTORY SALES OF MOTOR VEHICLES FROM CANADIAN AND U.S. PLANTS, BY CANADIAN, U.S., AND OTHER DESTINATIONS: 1965-1980 (cont.)

	Plants in United States				Plants in Canada				
Year	Exports to Canada	Other exports	Domestic	Total	Exports to U.S.	Other exports	Domestic	Total	U.S.-Canada total
				Trucks and buses (cont.)					
1971	69,026	69,812	1,914,308	2,053,146	166,307	29,924	83,107	279,338	2,332,487
1972	94,453	57,983	2,294,371	2,446,807	204,405	23,223	90,595	318,223	2,765,030
1973	120,463	72,412	1,786,813	2,979,688	215,260	27,293	112,974	355,527	3,335,215
1974	167,514	90,173	2,469,626	2,727,313	188,895	39,556	148,048	376,499	3,103,812
1975	133,701	135,701	2,002,758	2,272,160	181,165	47,742	161,158	390,065	2,662,225
1976	128,524	116,855	2,733,670	2,979,049	265,623	44,065	188,226	497,914	3,476,963
1977	135,078	127,423	3,179,020	3,441,521	347,592	47,278	210,614	605,484	4,047,005
1978	138,970	151,621	3,415,648	3,706,239	396,935	51,195	214,169	662,299	4,368,538
1979	158,394	137,231	2,741,081	3,036,706	348,231	43,861	240,983	633,075	3,669,781
1980	86,420	117,055	1,463,808	1,667,283	290,529	47,228	188,211	525,968	2,193,251
				Total motor vehicles					
1965	56,090	285,434	10,736,681	11,078,205	40,863	55,296	749,742	845,901	11,924,106
1966	141,346	244,658	9,943,406	10,329,410	219,179	60,281	607,745	887,205	11,216,615
1967	281,339	210,285	8,484,602	8,976,226	424,168	61,828	455,754	941,750	9,917,976
1968	336,169	209,827	10,172,240	10,718,236	625,512	68,146	459,355	1,153,013	11,871,249
1969	346,649	212,592	9,587,653	10,146,894	874,316	66,266	402,190	1,342,772	11,489,666
1970	299,392	186,878	7,752,987	8,239,257	839,404	62,856	269,051	1,171,311	9,419,568
1971	421,156	180,560	10,036,022	10,637,738	946,076	67,578	341,141	1,354,795	11,992,533
1972	476,916	146,988	10,646,841	11,270,745	1,041,035	60,516	353,566	1,455,117	12,725,862
1973	596,562	175,111	11,865,662	12,637,335	1,077,667	68,419	435,480	1,581,566	14,218,901
1974	667,977	199,672	9,190,920	10,058,569	991,265	92,051	465,026	1,548,342	11,606,911
1975	683,054	225,900	8,076,058	8,985,012	894,572	105,891	432,847	1,433,310	10,418,322
1976	691,159	214,022	10,571,471	11,476,652	1,074,411	119,396	438,751	1,632,558	13,109,210
1977	721,151	229,731	11,691,488	12,642,370	1,179,586	134,426	447,173	1,761,185	14,403,555
1978	680,522	281,696	11,909,211	12,871,429	1,161,770	158,232	469,870	1,789,872	14,661,301
1979	740,491	296,222	10,419,219	11,455,932	930,617	136,589	539,043	1,606,249	13,062,181
1980	575,277	187,919	7,304,113	8,067,309	829,768	133,525	389,799	1,353,092	9,420,401

SOURCE: Motor Vehicle Manufacturers Association of the United States, Inc., special release.

TABLE XVI-10. U.S.-CANADA TRADE IN AUTOMOTIVE PRODUCTS, U. S. IMPORTS FROM CANADA AND CANADIAN IMPORTS FROM THE UNITED STATES: 1974-1980

(In millions of U.S. dollars)

	1974	1975	1976	1977	1978	1979	1980
U.S. exports[a]							
Cars	1,657	2,142	2,354	2,655	2,613	3,147	2,906
Trucks	916	922	985	1,057	1,158	1,654	1,044
Parts	3,980	4,409	5,550	6,434	7,080	7,344	6,478
Sub total	6,554	7,472	8,889	10,146	10,851	12,145	10,428
Tires and tubes	223	170	116	145	113	128	124
Total exports	6,777	7,643	9,005	10,290	10,964	12,274	10,552
U.S. imports							
Cars	2,595	2,809	3,477	3,795	4,129	3,707	3,802
Trucks	887	917	1,363	1,841	2,036	1,978	1,893
Parts	1,997	2,008	2,983	3,496	4,160	3,831	2,909
Sub total	5,479	5,734	7,823	9,132	10,326	9,516	8,603
Tires and tubes	65	67	166	135	167	200	196
Total imports	5,544	5,801	7,989	9,267	10,493	9,715	8,800
Net balance	+1,233	+1,842	+1,016	+1,023	+ 471	2,558	1,753

SOURCE: U.S. Department of Commerce, special release.

NOTE: Data exclude U.S.-Canadian trade in materials for use in the manufacture of automotive parts. Data are adjusted to reflect transaction values for vehicles. $1.00 Canadian = $0.997 U.S., 1973; $1.02246, U.S., 1974; $.984001, U.S. 1975; $1.0141, U.S. 1976 $0.94095, U.S. 1977; $0.91132, U.S. 1978; $.85471, U.S. 1979; and $.83560, U.S., 1980.

a. Canadian import data. Parts exports (Canadian imports) adjusted to exclude tooling charges to millions of U.S. dollars as follows: 1973, $68.00; 1974, $188.00; 1975, $110.00; 1976, $105.00; and 1977, $72.00.

TABLE XVI-11. EMPLOYMENT IN MOTOR-VEHICLE-RELATED INDUSTRIES IN MICHIGAN: MARCH 1979 AND MARCH 1980

Industry title	Percent Motor-Vehicle-Related	Total Employment	
		March 1979	March 1980
Woven Carpets & Rugs	100.0%	*	*
Coated Fabrics, Not Rubberized	100.0	*	*
Automotive Trimmings	99.9	18,025	12,750
Fabricated Textile Products, N.E.C.	93.7	*	*
Public Building & Related Furniture	29.7	2,650	3,125
Paints, Varnishes & Allied Products	63.9	3,675	3,200
Tires & Inner Tubes	100.0	*	*
Rubber & Plastic Hose & Belting	78.2	850	250
Misc. Plastic Products	66.7	27,500	25,900
Flat Glass	92.3	*	*
Glass Products	42.9	4,175	3,900
Gaskets, Packing & Sealing Devices	60.0	1,600	1,350
Blast Furnaces, Steel Works & Rolling Mills	91.2	24,300	21,400
Gray Iron Foundries	87.3	27,725	19,500
Malleable Iron Foundries	94.0	6,150	4,325
Steel Foundries, N.E.C.	28.8	1,850	1,850
Drawing & Insulating of Nonferrous Wire	46.9	1,400	1,875
Aluminum Foundries	45.4	4,400	3,900
Hardware, N.E.C.	69.9	16,400	14,475
Screw Machine Products	48.3	6,750	6,075
Bolts, Nuts, Screws, Rivets & Washers	83.2	4,550	4,225
Iron & Steel Forgings	65.7	6,025	4,775
Automotive Stampings	100.0	58,800	45,225
Steel Springs, Except Wire	76.9	1,950	1,300
Internal Combustion Engines	86.2	*	*
Special Tools & Dies	72.6	27,450	26,275
Carburetors, Pistons, Piston Rings & Valves	74.4	6,450	5,575
Radio & Television Receiving Sets	16.0	1,400	1,175
Storage Batteries	100.0	*	*
Elec. Equip. for Internal Comb. Engines	86.1	12,825	9,200
Motor Vehicle & Passenger Car Bodies	100.0	238,400	209,750
Truck & Bus Bodies	100.0	1,225	1,875
Motor Vehicle Parts & Accessories	100.0	173,575	135,325
Truck Trailers	100.0	*	*
TOTAL		707,475	592,925

SOURCE: Michigan Employment Security Commission; Bureau of Research and Statistics, Motor Vehicle and Related Industries in Michigan, Summer 1981.

* Included in totals to avoid disclosure.
N.E.C.- Not elsewher classified.

TABLE XVI-12. NEW PASSENGER CAR AND TRUCK REGISTRATIONS IN MICHIGAN AND THE UNITED STATES, BY NAMEPLATE: 1979 AND 1980

	1979		1980	
Make	Michigan	United States	Michigan	United States
Passenger cars				
AMC[a]	15,910	156,753	14,325	150,878
Chrysler	25,368	243,643	12,552	138,385
Dodge	30,263	367,002	20,473	250,556
Plymouth	27,217	322,752	19,116	236,522
Ford	84,873	1,472,724	60,802	1,046,887
Lincoln	9,851	128,097	5,305	72,740
Mercury	38,147	497,120	25,786	326,361
Buick	47,192	686,315	42,353	707,544
Cadillac	16,997	307,652	11,088	212,557
Chevrolet	134,212	2,104,213	94,604	1,725,874
Oldsmobile	60,369	931,170	44,731	807,000
Pontiac	52,980	773,816	37,392	612,794
Other	68,064	2,343,654	60,960	2,472,839
TOTAL	611,443	10,334,911	449,487	8,760,937
Motor trucks				
Chrysler Corp.	15,139	371,648	10,026	256,829
Ford	48,769	1,122,656	29,965	784,132
Chevrolet	49,593	1,084,870	26,281	737,788
G.M.C.	14,275	283,140	7,238	181,252
International	3,948	116,579	2,079	74,484
Jeep truck	7,485	145,214	3,246	81,923
Pacific Car and Foundry	403	23,586	251	18,171
Mack	440	29,266	358	21,743
Freightliner	208	13,636	204	11,473
White[b]	309	12,505	165	7,664
Other	4,684	264,810	4,577	301,318
TOTAL	145,253	3,467,910	84,390	2,476,777

SOURCE: Compiled from data supplied by R.L. Polk & Company. Further reproduction not authorized without the express permission of R.L. Polk & Company.

a. Passenger cars manufactured by American Motors Corporation.

b. Trucks manufactured by White Motor Corporation.

TABLE XVI-13. NEW PASSENGER CAR AND NEW TRUCK REGISTRATIONS IN MICHIGAN, BY COUNTY: 1975-1980

County	1975	1976	1977	1978	1979	1980
			Passenger cars			
Alcona	329	430	430	467	479	328
Alger	349	351	362	342	322	288
Allegan	2,484	2,837	2,928	2,894	2,761	2,142
Alpena	1,246	1,520	1,519	1,416	1,342	940
Antrim	439	583	650	608	609	458
Arenac	540	711	689	781	770	512
Baraga	343	375	427	444	344	306
Barry	1,274	1,497	1,464	1,565	1,485	1,166
Bay	4,983	6,483	6,893	6,620	5,954	4,168
Benzie	373	457	469	485	483	329
Berrien	7,223	8,623	9,322	9,039	8,123	6,014
Branch	1,387	1,798	1,955	1,923	1,657	1,109
Calhoun	6,018	7,205	7,800	7,334	6,391	4,333
Cass	1,499	1,924	1,939	1,989	1,684	1,259
Charlevoix	616	830	843	916	870	687
Cheboygan	665	795	909	855	768	561
Chippewa	1,316	1,425	1,240	1,169	978	893
Clare	844	1,025	1,169	1,114	958	811
Clinton	1,722	2,357	2,394	2,322	2,241	1,524
Crawford	386	437	565	457	423	305
Delta	1,140	1,379	1,428	1,416	1,265	968
Dickinson	888	1,089	1,079	1,122	1,037	834
Eaton	2,816	3,395	3,820	3,710	3,607	2,476
Emmet	677	873	998	1,124	947	871
Genesee	24,593	32,915	38,121	36,292	32,941	22,534
Gladwin	659	823	854	875	866	736
Gogebic	622	718	660	669	619	558
Grand Traverse	1,929	2,455	2,804	2,880	2,903	2,272
Gratiot	1,454	1,755	1,739	1,779	1,647	1,284
Hillsdale	1,191	1,540	1,653	1,768	1,488	1,025
Houghton	951	1,028	1,114	1,089	994	907
Huron	1,559	1,868	1,895	1,902	1,727	1,346
Ingham	16,366	19,642	21,472	22,268	19,915	14,418
Ionia	1,944	2,388	2,388	2,306	2,296	1,606
Iosco	1,130	1,416	1,435	1,338	1,276	989
Iron	482	594	598	557	505	478
Isabella	1,503	1,839	1,928	1,867	1,716	1,187
Jackson	6,339	7,281	7,878	7,877	7,058	4,932
Kalamazoo	9,075	10,930	11,516	11,635	10,598	8,584
Kalkaska	305	364	400	403	404	307

TABLE XVI-13. NEW PASSENGER CAR AND NEW TRUCK REGISTRATIONS IN MICHIGAN, BY COUNTY: 1975-1980 (cont.)

County	1975	1976	1977	1978	1979	1980
Kent	19,575	23,916	25,700	27,079	25,627	20,147
Keweenaw	74	94	76	78	72	65
Lake	200	237	252	228	220	185
Lapeer	2,703	3,389	3,758	3,856	3,777	2,513
Leelanau	294	467	433	462	431	355
Lenawee	3,590	4,517	5,001	5,242	4,507	3,105
Livingston	3,420	4,447	5,381	5,586	5,447	3,933
Luce	254	303	291	255	287	204
Mackinac	346	460	448	402	396	327
Macomb	45,787	58,261	64,854	65,443	62,197	46,314
Manistee	916	1,064	1,086	1,056	948	699
Marquette	2,524	2,988	2,974	2,992	2,740	2,287
Mason	854	998	1,038	1,018	1,086	778
Mecosta	926	1,169	1,228	1,258	1,204	950
Menominee	668	873	875	836	791	627
Midland	2,914	3,426	3,826	3,650	3,565	2,913
Missaukee	274	318	391	369	375	293
Monroe	4,616	6,105	6,878	6,465	6,149	4,044
Montcalm	1,800	2,171	2,157	2,304	2,330	1,650
Montmorency	316	363	437	396	401	270
Muskegon	4,848	6,150	6,432	6,516	6,289	4,960
Newaygo	986	1,116	1,284	1,233	1,183	1,021
Oakland	68,340	91,195	100,458	104,638	97,597	75,764
Oceana	586	775	807	829	877	731
Ogemaw	491	681	671	721	643	508
Ontonagon	361	363	396	395	392	363
Osceola	630	731	810	794	860	603
Oscoda	184	212	223	223	206	135
Otsego	568	747	823	796	723	638
Ottawa	5,423	6,993	7,557	7,716	7,552	6,022
Presque Isle	519	568	618	594	589	409
Roscommon	726	947	1,004	1,013	915	682
Saginaw	10,739	13,726	14,876	14,374	12,796	9,067
St. Clair	4,873	6,402	6,676	6,673	5,969	4,345
St. Joseph	1,973	2,671	2,728	2,824	2,490	1,946
Sanilac	1,511	2,005	2,040	2,169	1,825	1,348
Schoolcraft	351	452	439	424	443	327
Shiawassee	4,089	3,747	4,159	4,311	4,054	2,664
Tuscola	2,296	2,839	3,094	2,999	2,945	2,156
Van Buren	2,468	2,915	2,865	2,977	2,749	2,156

TABLE XVI-13. NEW PASSENGER CAR AND NEW TRUCK REGISTRATIONS IN MICHIGAN, BY COUNTY: 1975-1980 (cont.)

County	1975	1976	1977	1978	1979	1980
Washtenaw	12,111	15,053	16,913	17,940	15,123	11,325
Wayne	168,089	192,981	211,471	211,886	187,021	131,958
Wexford	764	944	1,043	1,028	1,031	830
State owned	1,840	1,245	1,899	2,035	2,169	1,416
TOTAL	496,476	606,979	662,223	669,700	611,443	448,071
			Truck			
Alcona	131	240	222	232	173	109
Alger	180	243	301	266	180	122
Allegan	1,089	1,511	1,735	1,861	1,532	775
Alpena	529	742	784	766	633	320
Antrim	211	315	327	377	270	161
Arenac	218	379	346	394	337	143
Baraga	164	292	270	294	204	104
Barry	585	865	897	917	716	382
Bay	1,552	2,284	2,345	2,525	1,764	924
Benzie	160	249	266	293	180	90
Berrien	2,203	3,125	3,706	4,127	3,029	1,530
Branch	527	886	1,050	1,222	832	466
Calhoun	1,680	2,367	2,406	2,744	1,988	1,026
Cass	644	951	1,168	1,262	937	406
Charlevoix	266	444	554	538	388	204
Cheboygan	328	444	473	436	335	141
Chippewa	551	759	708	671	489	282
Clare	430	658	657	697	470	282
Clinton	820	1,238	1,165	1,296	966	435
Crawford	177	223	279	262	206	110
Delta	502	766	708	734	542	314
Dickinson	462	574	632	666	586	321
Eaton	1,280	1,720	2,042	2,142	1,454	736
Emmet	321	474	565	548	439	230
Genesee	6,033	9,538	10,430	11,701	7,347	3,566
Gladwin	337	483	544	582	396	220
Gogebic	276	399	389	402	324	223
Grand Traverse	810	1,225	1,524	1,568	1,189	772
Gratiot	710	1,049	865	899	736	364
Hillsdale	566	782	911	1,020	712	347
Houghton	328	509	550	559	401	286
Huron	630	849	765	905	707	411
Ingham	3,424	4,953	5,705	6,818	5,222	2,513
Ionia	784	1,198	1,179	1,363	995	522
Iosco	407	605	619	686	434	257

TABLE XVI-13. NEW PASSENGER CAR AND NEW TRUCK REGISTRATIONS IN MICHIGAN, BY COUNTY: 1975-1980 (cont.)

County	1975	1976	1977	1978	1979	1980
Iron	275	389	393	368	343	234
Isabella	587	908	792	980	718	433
Jackson	2,027	2,538	2,736	3,373	2,585	1,257
Kalamazoo	2,279	3,267	3,434	4,052	3,073	1,697
Kalkaska	259	349	414	382	306	212
Kent	4,552	6,376	7,787	9,621	8,125	4,362
Keweenaw	22	36	38	28	27	25
Lake	90	142	145	137	135	72
Lapeer	1,136	1,827	1,916	2,305	1,519	650
Leelanau	101	190	204	219	157	93
Lenawee	1,316	1,958	2,237	2,543	1,629	778
Livingston	1,346	1,841	2,180	2,445	1,770	810
Luce	143	221	191	186	126	95
Mackinac	178	222	283	262	183	104
Macomb	9,114	12,377	14,322	17,645	12,206	7,984
Manistee	318	467	527	544	389	224
Marquette	1,349	1,868	1,782	1,974	1,238	760
Mason	334	439	512	582	489	239
Mecosta	448	705	654	709	535	312
Menominee	284	389	404	452	374	232
Midland	955	1,257	1,305	1,455	1,060	563
Missaukee	146	252	302	310	233	152
Monroe	1,658	2,349	2,584	3,213	1,658	973
Montcalm	800	1,153	1,175	1,331	1,043	546
Montmorency	169	256	270	292	198	92
Muskegon	1,232	2,040	2,480	3,133	2,310	1,258
Newaygo	429	625	689	748	575	327
Oakland	12,221	16,596	19,360	22,617	15,771	8,951
Oceana	292	483	558	627	510	281
Ogemaw	243	409	390	431	343	190
Ontonagon	195	230	247	234	189	153
Osceola	385	525	548	615	481	252
Oscoda	82	127	155	158	111	54
Otsego	358	445	501	569	434	234
Ottawa	1,475	2,331	2,839	3,476	2,839	1,435
Presque Isle	255	339	342	407	297	156
Roscommon	286	423	476	556	344	236
Saginaw	2,693	4,051	4,336	4,789	3,488	1,880
St. Clair	1,440	2,106	2,382	2,856	1,861	1,009
St. Joseph	849	1,263	1,399	1,616	1,145	649

TABLE XVI-13. NEW PASSENGER CAR AND NEW TRUCK REGISTRATIONS IN MICHIGAN, BY COUNTY: 1975-1980 (cont.)

County	1975	1976	1977	1978	1979	1980
Sanilac	715	1,037	954	1,195	828	430
Schoolcraft	202	259	286	252	213	136
Shiawassee	1,474	1,996	1,999	2,126	1,479	676
Tuscola	1,181	1,722	1,591	1,762	1,226	649
Van Buren	1,090	1,514	1,567	1,808	1,489	745
Washtenaw	2,807	3,632	4,129	4,924	3,264	1,797
Wayne	21,815	28,073	31,827	39,885	27,721	19,891
Wexford	367	515	557	642	456	238
State owned	667	691	588	632	647	770
TOTAL	111,956	156,547	173,288	203,329	144,606	83,620

SOURCE: R.L. Polk & Co., Motor Statistical Division, special release.

TABLE XVI-14. RANKING OF MICHIGAN COUNTIES ACCORDING TO TOTAL NEW CAR REGISTRATIONS PER 100,000 POPULATION: 1980

County	Registrations per 100,000 population		County	Registrations per 100,000 population	
	1979	1980		1979	1980
Oakland	9,567	7,476	Crawford	4,500	3,219
Macomb	8,801	6,669	Mackinac	3,667	3,208
Wayne	7,930	5,676	Osceola	4,751	3,794
Ingham	7,357	5,296	Gratiot	4,149	3,176
Genesee	7,301	5,004	Muskegon	3,960	3,157
Kent	5,803	4,537	Arenac	5,500	3,136
Washtenaw	5,956	4,332	St. Clair	4,448	3,133
Otsego	4,788	4,258	Ionia	4,620	3,108
Roscommon	5,654	4,178	Alger	3,252	3,102
Grand Traverse	5,771	4,154	Ogemaw	3,969	3,090
Kalamazoo	5,100	4,051	Marquette	3,624	3,086
Saginaw	7,899	3,979	Chippewa	3,338	3,083
Midland	5,014	3,954	Calhoun	4,588	3,078
Livingston	5,491	3,923	Luce	4,100	3,064
Ottawa	4,885	3,836	Manistee	4,309	3,040
Emmet	4,285	3,822	Mason	4,361	2,953
Schoolcraft	5,092	3,814	Benzie	4,391	2,947
Tuscola	5,287	3,793	Missaukee	3,750	2,931
Shiawassee	5,718	3,745	Newaygo	3,521	2,929
Gladwin	4,510	3,712	Alpena	4,030	2,916
Huron	4,824	3,696	Presque Isle	4,148	2,877
Ontonagon	3,920	3,692	Gogebic	3,158	2,844
Lapeer	5,458	3,666	Antrim	3,646	2,833
Montmorency	5,207	3,616	Kalkaska	3,132	2,810
Baraga	3,954	3,608	Eaton	4,299	2,808
Sanilac	4,585	3,531	Branch	4,271	2,765
Berrien	4,872	3,519	Clinton	4,038	2,735
Iron	3,539	3,513	Cheboygan	3,783	2,723
Iosco	4,239	3,498	Monroe	4,672	2,672
St. Joseph	4,779	3,480	Allegan	3,642	2,634
Bay	4,957	3,478	Mecosta	3,440	2,573
Montcalm	5,054	3,471	Barry	3,437	2,548
Charlevoix	4,439	3,454	Cass	3,685	2,543
Lenawee	5,186	3,451	Leelanau	3,057	2,538
Clare	4,008	3,403	Delta	3,194	2,484
Alcona	5,206	3,375	Hillsdale	3,711	2,432
Oceana	4,156	3,343	Houghton	3,753	2,397
Wexford	4,582	3,321	Menominee	2,897	2,341
Keweenaw	3,130	3,310	Lake	3,056	2,371
Jackson	4,737	3,259	Isabella	3,306	2,200
Dickinson	4,051	3,235	Oscoda	2,861	1,973
Van Buren	4,398	3,233	Michigan	6,641	4,851

SOURCE: Developed from Michigan Department of Management and BUdget, special release; and R.L. Polk & Company, special release. Further reproduction not authorized without the express permission of R.L. Polk & Company.

TABLE XVI-15. RANKING OF MICHIGAN COUNTIES ACCORDING TO TOTAL NEW TRUCK REGISTRATIONS PER 100,000 POPULATION: 1980

County	Registrations per 100,000 population	
	1979	1980
Kalkaska	2,372	1,940
Iron	2,333	1,720
Schoolcraft	2,448	1,586
Otsego	2,874	1,562
Ontonagon	1,890	1,556
Missaukee	2,330	1,520
Roscommon	2,123	1,446
Luce	1,800	1,427
Grand Traverse	2,362	1,411
Osceola	2,657	1,335
Alger	1,818	1,323
Oceana	2,417	1,285
Keweenaw	1,174	1,273
Dickinson	2,289	1,245
Montmorency	2,571	1,232
Baraga	2,345	1,226
Clare	1,966	1,183
Branch	2,124	1,162
St. Joseph	2,198	1,161
Crawford	2,191	1,161
Ogemaw	2,117	1,156
Macomb	1,727	1,150
Montcalm	2,262	1,149
Tuscola	2,201	1,142
Gogebic	1,653	1,137
Huron	1,974	1,128
Alcona	1,880	1,122
Van Buren	2,302	1,117
Gladwin	2,062	1,109
Presque Isle	2,091	1,097
Cheboygan	1,650	1,082
Sanilac	2,080	1,056
Charlevoix	1,980	1,026
Marquette	1,636	1,025
Mackinac	1,694	1,020
Ionia	2,002	1,010
Emmet	1,986	1,009
Antrim	1,616	996
Alpena	1,901	993
Kent	1,840	982
Chippewa	1,669	974
Manistee	1,768	974
Arenac	2,407	969
Allegan	2,021	953
Wexford	2,027	952
Shiawassee	2,086	950
Newaygo	1,711	938
Lapeer	2,195	929
Ingham	1,929	923
Lake	1,875	923
Ottawa	1,826	914
Iosco	1,442	909
Mason	1,964	907
Gratiot	1,854	900
Berrien	1,817	895
Menominee	1,370	885
Oakland	1,546	883
Lenawee	1,875	865
Wayne	1,175	856
Mecosta	1,529	845
Barry	1,657	835
Eaton	1,733	835
Jackson	1,735	831
Saginaw	1,539	825
Hillsdale	1,776	823
Cass	2,050	820
Livingston	1,784	808
Benzie	1,636	806
Delta	1,369	806
Isabella	1,383	803
Kalamazoo	1,479	801
Muskegon	1,433	801
Genesee	1,626	792
Oscoda	1,542	789
Clinton	1,740	781
Bay	1,575	771
Midland	1,491	764
Houghton	1,111	756
Calhoun	1,427	729
Monroe	1,260	729
St. Clair	1,387	728
Washtenaw	1,285	687
Leelanau	1,113	665
Michigan	1,570	905

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XVII. TRANSPORTATION

Chapter V of Walter L. Dunham, Banking and Industry in Michigan (Detroit, Madeira Publishing Co., 1929), pp. 85-94 is reproduced here because of its relevance in transportation history.

Transportation.

Michigan is comparatively new among the permanently settled portions of the globe, and yet during the brief period of its history under the rule of civilized men, what is now the state has assumed world leadership in several phases of the science of transportation. Indeed, in at least one respect, the state has developed to its ultimate degree the means whereby wheeled vehicles may proceed in safety at high speed. And this development has taken place almost entirely during the last quarter of a century.

As intimated in the preceding paragraph, Michigan's world leadership in transportation has been reached in the fields of motor car manufacture and of highway construction. This chapter, however, will be devoted to a necessarily cursory survey of transportation in the form of railways, canals and highways, leaving the subject of automotive developments, both on land and in the air, for a later chapter.

How Transportation Serves.

Manufacturing industries, as distinguished from household industries, commonly come late in the economic development of any region. The hunter and trapper come first, and are followed by the pioneer settler, who is half farmer and half hunter. The pioneer is soon replaced by the real agriculturist. Then with further increases in population, a village is started, usually centering upon the trading post which preceded even the pioneer settler. And with favorable conditions the village finally becomes a town, and later a city. Such growth depends largely upon transportation.

Now commerce and industry cannot exist without markets, i.e., people to carry on production, to buy and sell, and to consume the products of industry. So commerce and industry at the outset depend upon transportation. And it is obviously true, also, that with each improvement in transportation facilities comes a corresponding increase in production and trade of all kinds, as new sources of material are tapped and a wider range of markets is made available.

Transportation Came Slowly.

The foregoing explains in a measure the failure of commerce and industry to develop on a large scale in Michigan until the middle of the Nineteenth Century. Rich farming lands, vast forests of hardwood and pine, enormous deposits of copper, iron and salt, and the finest fresh water fisheries in the world, all awaited exploitation; but transportation was slow in coming. And the reason for this delay is to be found in the inexperience, to put it charitably, of territorial and state officials and of a majority of bankers prior to 1850.

Money borrowed by the state for public improvements was squandered; legislation intended to encourage construction of highways, canals and railroads proved disastrously impractical; and to obtain sound money that should have flowed easily through Michigan banks, legitimate promoters were forced to borrow, at excessive rates from eastern reservoirs of capital.

Here it should be admitted that the unfortunate condition of Michigan banking in the first half of the century may be traced in some degree to the fundamental mistakenness and inadequacy of Michigan banking laws in the early days.

Earliest Transportation.

For a number of years after de la Mothe Cadillac established in 1701 the trading post which he called Fort Pontchartrain and which later became known as Detroit, the birchbark canoe was the only means of conveyance, except "shank's mare," for men and goods in the Upper Lakes region. The only exception was a fleet of barges that Cadillac caused to be constructed, soon after the settlement of Detroit, for use in the fur trade on the larger lakes and rivers. Then in 1705 Cadillac ordered built a ten-ton sloop, and thereafter both French and British constructed many more sailing vessels during the struggle for trade supremacy on the Great Lakes.

In 1818 the first steam vessel, called the Walk-in-the-Water, made its advent upon the lakes, making Detroit the western terminus for most of its voyages from Buffalo. Since that time the development of steam navigation upon the Great Lakes has continued, until today we see huge 10,000 ton ore carriers, and passenger vessels with accommodations for two and three thousand passengers, plying the waters of the Inland Seas.

In the early days, when the interior of Michigan was an unsettled wilderness, water transportation served well enough in the summer time. But when winter came, and the rivers and lakes were frozen over, navigation ceased and the frontier posts were isolated, except for what little communication was possible over the Indian trails.

The most important of these trails were those leading from the mouth of the Miami (Maumee) River, where Toledo is now located, to Detroit; from Detroit to Fort Dearborn, later known as Chicago; from Detroit to the Saginaw district, and of course the Marquette Trail to the Upper Peninsula, by way of Mackinac. Later these favorable routes were followed first by the highways and afterward by the railway lines.

First Road Building.

The genesis of wagon road building in Michigan was in 1821, when Governor Lewis Cass inaugurated the first comprehensive construction program, although the first inland highway dated from 1782, when the Moravians built a road between Detroit and their settlement on the Huron (now Clinton) River. The earliest road of all in Michigan was along the Detroit River front for the convenience of farmers whose properties ran down to the river. The primitive highway constructed by the Moravians, by the way, is now Gratiot Avenue, and their settlement has become the city of Mount Clemens.

Through the efforts of Governor Cass, who was ably seconded by William Trowbridge, territorial secretary, Congress appropriated in 1824 the sum of $20,000 for a road between Toledo and Detroit. In 1827 a like appropriation was made for the road from Detroit to Chicago; and in the same year appropriations were made for roads between Detroit and Saginaw Bay, and Detroit and Fort Gratiot. In 1833 Congress again appropriated money for a road from Detroit through Shiawassee County to the mouth of the Grand River, where Grand Haven now stands.

Thus did the great system of radial highways leading out of Detroit get its start. Today the entire state of Michigan is a vast network of highways, many hundreds of miles being paved with concrete. And it is generally conceded that the huge wheel of paved highways around Detroit, ranging from forty to two hundred feet in width, is unequalled anywhere else in the world.

During the period while mud-buttomed or corduroyed roads were Michigan's sole arteries of traffic, aside from the water routes, travelers progressed on horseback or by stage-coach. Regular stage lines were operated between Toledo and Detroit, and between Detroit and the interior villages, with fares averaging five cents a mile. A stage line was also operated between Buffalo and Detroit, over the Canadian Peninsula.

Many famous taverns sprang up along the stage routes, notably the Walker Tavern near Adrian, in the district now known as the Irish Hills. "Uncle Ben" Woodworth's Steamboat Hotel, at the northeast corner of Woodbridge and Randolph

Streets, was the Detroit headquarters of all the stage lines, as well as of the steam lines.

Stages continued to be one of the principal means of transportation until the railroads began to cover the same routes. Then the stage business fell off, until the last line was discontinued in 1873.

Inception of Railroads.

The railroad era had its inception in Michigan on July 31, 1830, when the Detroit & Pontiac Railroad was chartered, the first within the limits of the Northwest Territory. This road was the first to lay rails and use a locomotive for operating power, but the line was not completed into Pontiac until 1843. Meanwhile other and more important railroads were under construction.

In 1848 the Oakland & Ottawa Railroad company was chartered to continue the Detroit & Pontiac line to Lake Michigan, and in 1855 the two companies were consolidated under the name of the Detroit & Milwaukee Railroad Company. This organization pushed the line through to Grand Rapids and Grand Haven in 1858. The Detroit & Milwaukee Railroad Company was taken over by the Great Western Railroad of Canada in 1878, and was reorganized under the name of the Detroit, Grand Haven & Milwaukee Railroad, thus taking cognizance of the fact that steamer connections had been established with the Wisconsin metropolis.

Both the Great Western and the Detroit, Grand Haven & Milwaukee later were incorporated into the Grand Trunk System. This was the only one of the early railroads in Michigan that did not come under state ownership. This line later lost much of its importance, although today plans are complete for increased service, including double tracks as far as Pontiac.

The Michigan Central.

The Detroit & St. Joseph Railroad was chartered June 29, 1832. Up to 1837, when the state was authorized to buy the road, $117,000 had been expended and not a mile of track had been laid. The state changed the name of the line, calling it the Michigan Central. After many vicissitudes the road was completed to Kalamazoo in 1846, when the property was sold for $2,000,000 to eastern capitalists. Thereafter the tracks were laid into Chicago, the first train entering that city on May 20, 1852. Since that time the Michigan Central, now affiliated with the New York Central lines, has become the state's most important railway system, operating among other lines the route between Detroit and Niagara Falls, via the Canadian Peninsula.

Meanwhile the Erie & Kalamazoo Railroad, chartered shortly after the Detroit & St. Joseph, and which had been completed through to Adrian in 1836, was purchased by the state in 1837 and was sold again for $500,000 to eastern capitalists in 1846. This line, under private ownership, also pushed its tracks toward Chicago, its first train entering the city on May 21, 1852, one day later than the first train of the Michigan Central. The Erie & Kalamazoo had been renamed the Lake Shore and Michigan Southern by its eastern owners, and later became a division of the New York Central Lines.

Longest Railway System.

The Pere Marquette, second of the two great railroad systems of Michigan, was a later development, its first link between Flint and Saginaw being completed in 1864. Bit by bit this new system was built up, by new construction and absorption of older lines, until its original tracks extended from Toledo to Ludington, via Bay City, with car ferries across Lake Michigan to Milwaukee and Manitowoc. Since then the Pere Marquette has acquired trackage in Michigan totaling 2,247 miles, making it the longest system within the state. Included among Pere Marquette lines today are those between Detroit and Grand Rapids, via Lansing; Chicago and Ludington, along the shore of Lake Michigan; Grand Rapids and Petoskey; a number of minor divisions, and two lines across the Canadian Peninsula, from Port Huron and Detroit, with car ferries to Conneaut, Ohio.

Through the influence of the Detroit Board of Trade, the Detroit, Butler & St. Louis Railroad was promoted, connecting with the Wabash Railroad at Butler, Indiana. This brought the Wabash into Detroit, the first through train from St. Louis arriving on August 14, 1881.

The Toledo & Ann Arbor Railroad, originally a Toledo enterprise, was pushed through to Ann Arbor in 1880, and later was continued to Frankfort on Lake Michigan, where car ferries were put into service to Manitowoc and Menominee.

Upper Peninsula Lines.

The first railroad in the Upper Peninsula was the Peninsular, running between Escanaba and Marquette, where it connected with the Marquette, Houghton & Ontonagon, which was opened between Marquette and Ishpeming in 1857. The first named line later was absorbed by the Chicago & Northwestern, giving the Upper Peninsula direct connection with Chicago; the other line was absorbed by the Duluth, South Shore & Atlantic, which runs from Duluth to Sault Ste. Marie. The Detroit, Mackinac & Marquette, built in 1880 between St. Ignace and Marquette, was also absorbed by the Duluth, South Shore & Atlantic. These roads, together with the

Minneapolis, St. Paul & Sault Ste. Marie, built still later, comprise the Upper Peninsula roads that serve the iron range district of Northern Michigan.

During the railroad development era between 1830 and 1900, numerous other small lines were built in Michigan, some of them being abandoned, some absorbed by the larger systems and few continuing to operate today.

Thus it was that in 1900 there were upward of 8,000 miles of railroad in operation within the state. This development over a period of over seventy years has never been surpassed by any other state of the Union.

Governmental Ownership.

Reference has been made to the purchase by the state of railroad lines existing, either in fact or as projects, in 1837. This comprised Michigan's sole experiment in the governmental ownership of public utilities prior to the present century, when municipal ownership became the rage.

Governor Mason was chiefly responsible for the experiment, and it was in this connection that the ill-advised $5,000,000 loan of 1836 was obtained by the state. In March, 1837, the State Legislature authorized the construction of three trunk-line railroads across the state; also three canals. The Southern Railway was to extend from Monroe, on Lake Erie, to New Buffalo, on Lake Michigan, thus opening up the southern tier of counties; the Central was to extend from Detroit to St. Joseph, via Ypsilanti, Jackson, Marshall and Kalamazoo; and the Northern was to extend from Port Huron to Grand Haven, via Lapeer, Flint, Owosso and Grand Rapids. The canals were to be constructed between the Clinton and Kalamazoo Rivers, the Saginaw and Grand Rivers, and encircling the falls of St. Mary's River at the Soo.

Included in the government-ownership legislation was a proviso that railroad and canal projects conflicting with state-owned projects should be purchased. It was on this basis that the Erie & Kalamazoo (later the Lake Shore & Michigan Southern) and the Detroit & St. Joseph (renamed the Michigan Central) came under state control. As earlier noted, the $5,000,000 loan was squandered and the roads finally resold, at a great loss, to private investors. No canal was ever completed, although many hundreds of thousands of dollars were spent on them, except the St. Mary's Ship Canal, which came much later under federal auspices.

The Interstate Commerce Commission in its various publications, especially Transport Statistics in the United States, gives extensive information about railroads. The Association of American Railroads also collects railway statistics.

Data on the Michigan highway system are obtained from the reports of the Michigan State Highway Commission. Information on drivers' licenses and the registration of motor vehicles is given in the reports of the Michigan Department of State. The Michigan Department of State Police collects statistics on the number of motor vehicle traffic accidents in Michigan. The Bureau of Public Roads of the U.S. Department of Commerce publishes an annual report, Highway Statistics, that gives a great deal of information about the nation's public roads.

The U.S. Bureau of the Census has published information on motor trucks in the 1977 Census of Transporation. The information is obtained on the basis of a sample of about 114,000 trucks out of an estimated 19,500,000 registered.

The Federal Aviation Agency releases a number of publications, including the FAA Statistical Handbook of Aviation, FAA Air Traffic Activity, and Census of U.S. Civil Aircraft, which contain a wealth of information pertaining to aviation activities.

Information regarding freight traffic on Michigan waterways can be found in Waterborne Commerce of the United States, a publication of the Corps of Engineers of the U.S. Department of the Army.

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TABLE XVII-1. EXISTING MUNICIPAL AND RURAL ROAD MILEAGE, BY TYPE AND BY GOVERNMENTAL LEVEL WITH PRIMARY JURISDICTION, MICHIGAN AND THE UNITED STATES: 1969-1979

		Rural						
		Type			Governmental level with primary jurisdiction			Total rural and municipal
Year	Municipal	Surfaced	Non-surfaced	Total	State	Local	Federal[a]	
Michigan								
1969	19,795	77,698	17,069	94,767	7,972	86,793	2	114,562
1970	19,939	77,472	17,318	94,790	7,971	86,817	2	114,729
1971	20,115	77,312	17,637	94,949	7,977	86,970	2	115,064
1972	20,232	80,732	17,096	97,828	7,968	87,200	2,660	118,060
1973	19,601	81,809	16,900	98,709	8,014	88,035	2,660	118,310
1974	19,916	81,935	16,740	98,675	8,243	87,972	2,460	118,591
1975	19,982	82,771	16,037	98,808	8,300	88,048	2,460	118,790
1976	20,053	83,624	15,321	98,945	8,316	88,169	2,460	118,998
1977	20,097	48,062[b]	51,006[b]	99,068	8,336	88,272	2,460	119,165
1978	20,190	48,264	50,905	99,169	8,345	88,364	2,460	119,359
1979	20,274	49,993	49,813	99,806	8,800	88,546	2,460	120,080
United States								
1969	548,573	2,391,325	770,401	3,161,726	704,371	2,274,709	182,676	3,710,299
1970	560,670	2,411,072	758,340	3,169,412	707,002	2,274,714	187,696	3,730,082
1971	593,047	2,415,878	750,017	3,165,895	712,785	2,256,271	196,839	3,758,942
1972	613,426	2,433,205	740,082	3,173,287	712,093	2,252,023	209,171	3,786,713
1973	631,129	2,436,070	739,684	3,175,754	710,461	2,249,446	215,747	3,806,883
1974	637,655	2,452,247	725,905	3,178,152	706,295	2,247,709	224,148	3,815,807
1975	639,550	2,483,355	715,241	3,198,596	710,797	2,260,544	227,255	3,838,146
1976	648,321	2,508,903	700,132	3,209,035	711,406	2,263,788	233,841	3,857,356
1977	687,328	2,498,428	681,411	3,179,839	702,215	2,235,670	242,147	3,867,400[c]
1978	694,655	2,534,409	655,999	3,190,408	704,421	2,255,526	230,850	3,885,452
1979	694,274	2,498,282	725,428	3,223,710	697,821	2,281,353	244,371	3,917,819

SOURCE: Federal Highway Administration, Highway Statistics, 1969 through 1979 (Washington, D.C.: annually), Tables M-1 and 3 (1979).

a. Comprises mileage of roads not forming a part of state or local highway systems.

b. The decrease in surfaced roads in Michigan is due to the surface type reclassification of approximately 36,000 miles of county roads.

c. 233 miles were unclassified by surface.

TABLE XVII-2. EXISTING MILEAGE OF STATE-ADMINISTERED PRIMARY ROADS AND STREETS IN MICHIGAN, BY TYPE OF SURFACE: 1950-1979

Year	Gravel, stone, and stabilized soil	Low type bituminous	High type bituminous	Portland cement and all other	Total
1950	1,349	2,276	1,057	3,565	8,235
1951	1,195	2,407	1,206	3,441	8,249
1952	1,021	2,560	1,447	3,217	8,245
1953	983	2,487	1,585	3,171	8,226
1954	960	2,535	1,688	3,083	8,266
1955	881	2,549	1,815	2,987	8,232
1956	776	2,697	2,551	3,337	9,351
1957	657	2,748	2,710	3,213	9,328
1958	553	2,792	3,146	2,970	9,441
1959	408	2,779	3,285	2,858	9,330
1960	230	2,807	3,449	2,739	9,225
1961	49	2,873	3,585	2,660	9,167
1962	18	2,825	3,589	2,750	9,182
1963	0	2,819	3,634	2,754	9,207
1964	0	2,751	3,765	2,732	9,248
1965	0	2,668	3,139	2,191	7,998
1966	0	2,749	3,811	2,648	9,208
1967	0	2,798	3,776	2,634	9,208
1968	0	2,798	3,830	2,587	9,215
1969	0	2,827	3,843	2,570	9,240
1970	0	2,807	3,906	2,538	9,251
1971	0	2,801	3,956	2,493	9,250
1972	0	2,785	3,977	2,483	9,245
1973	0	2,817	3,959	2,515	9,291
1974	0	2,817	3,954	2,551	9,322
1975	0	2,843	3,960	2,587	9,390
1976	0	2,976	4,020	2,421	9,417
1977	0	2,983	3,871	2,600	9,454
1978	0	3,017	4,044	2,407	9,468
1979	0	2,913	3,287	1,932	8,132

SOURCE: Federal Highway Administration, Highway Statistics, 1950 through 1979 (Washington, D.C.: annually), Table SM-2 (1979).

TABLE XVII-3. EXPENDITURES FOR CONSTRUCTION AND MAINTENANCE OF STATE-ADMINISTERED HIGHWAYS AND STREETS IN MICHIGAN AND THE UNITED STATES, SELECTED YEARS: 1925-1979

(In thousands of dollars)

	Construction[a]		Maintenance	
Year	Michigan	United States[b]	Michigan	United States[b]
1925	24,481	403,843	2,050	119,304
1930	24,612	728,887	6,554	193,928
1935	15,295	438,306	5,643	187,122
1940	20,542	563,074	8,642	218,776
1945	5,414	210,467	13,406	287,734
1950	34,405	1,533,859	15,272	501,487
1955	107,452	3,102,994	23,652	675,629
1956	150,536	3,661,979	25,063	756,473
1957	171,737	4,139,322	27,858	812,426
1958	170,316	4,713,644	24,368	867,137
1959	187,155	5,075,864	27,870	903,070
1960	219,941	4,669,349	25,555	985,648
1961	285,028	5,105,084	26,083	1,019,839
1962	235,192	5,608,404	26,780	1,093,279
1963	204,869	6,047,762	27,403	1,133,389
1964	159,112	6,362,372	28,818	1,210,321
1965	173,508	6,458,214	32,600	1,309,786
1966	227,239	7,056,353	30,707	1,402,296
1967	220,554	7,339,818	38,090	1,513,502
1968	215,732	7,866,362	35,172	1,593,652
1969	193,564	7,499,706	41,496	1,485,656
1970	220,900	8,866,017	41,984	1,928,819
1971	266,565	9,416,682	49,487	2,086,947
1972	266,723	9,383,859	49,497	2,236,190
1973	255,982	8,981,484	53,574	2,458,251
1974	311,408	9,390,755	55,676	2,656,449
1975	309,758	10,168,550	65,747	2,946,178
1976	294,332	9,676,657	70,260	3,116,823
1977	290,658	8,882,872	81,795	3,465,796
1978	243,517	10,015,631	87,450	4,037,824
1979	290,812	11,798,070	105,014	4,352,597

SOURCE: Federal Highway Administration, Highway Statistics, 1925 through 1979 (Washington, D.C.: annually), Table SF-4 (1950-1979 data).

a. Includes acquisition of right-of-way, preliminary and construction engineering, construction of roads, construction of major structures, and installation of traffic service facilities.

b. Prior to 1959 Alaska and Hawaii excluded.

TABLE XVII-4. MOTOR VEHICLE REGISTRATION IN MICHIGAN, BY TYPE AND COUNTY: FISCAL YEAR ENDING 30 SEPTEMBER 1981

County	Passenger	Commercial	Trailer	Motorcycle	Total
Alcona	5,412	2,090	1,552	338	9,392
Alger	4,140	1,970	1,038	383	7,531
Allegan	39,154	14,871	8,049	2,779	64,853
Alpena	16,206	6,163	4,428	1,121	27,918
Antrim	8,861	3,063	2,362	627	14,933
Arenac	7,252	3,107	2,098	455	12,912
Baraga	3,982	1,752	854	223	6,811
Barry	21,712	8,039	5,142	1,892	36,785
Bay	60,940	15,777	14,069	3,304	94,090
Benzie	6,088	2,253	1,628	437	10,406
Berrien	85,211	23,555	13,803	4,732	127,301
Branch	19,310	7,560	5,522	1,775	34,167
Calhoun	72,783	18,277	12,987	5,218	109,265
Cass	23,306	8,802	4,713	1,775	38,596
Charlevoix	10,391	3,811	2,430	833	17,465
Cheboygan	10,643	4,060	3,011	852	18,566
Chippewa	12,553	5,195	3,388	919	22,055
Clare	11,522	4,661	3,272	778	20,233
Clinton	26,595	9,153	6,315	2,296	44,359
Crawford	4,686	1,862	1,368	324	8,240
Delta	19,053	7,400	5,761	1,262	33,476
Dickinson	12,989	5,136	3,384	967	22,476
Eaton	41,385	11,441	8,526	3,213	64,565
Emmet	12,538	4,382	2,569	840	20,329
Genesee	235,694	50,890	38,065	12,880	337,529
Gladwin	9,317	3,969	2,995	618	16,899
Gogebic	8,787	3,654	1,870	540	14,851
Gd. Traverse	32,695	9,724	7,554	2,004	51,977
Gratiot	18,990	6,895	4,930	1,604	32,419
Hillsdale	19,697	7,905	5,003	1,670	34,275
Houghton	14,745	5,012	2,337	963	23,057
Huron	18,548	7,674	5,172	1,436	32,830
Ingham	141,281	29,495	17,950	8,219	196,945
Ionia	22,945	8,049	4,987	2,087	38,068
Iosco	14,267	4,625	3,883	974	23,749
Iron	6,862	3,098	1,699	345	12,005
Isabella	19,962	6,852	4,507	1,484	32,805
Jackson	75,657	20,241	13,331	5,015	114,244
Kalamazoo	110,771	24,139	16,271	6,595	157,776
Kalkaska	5,511	2,988	1,828	387	10,714

TABLE XVII-4. MOTOR VEHICLE REGISTRATION IN MICHIGAN, BY TYPE AND COUNTY: FISCAL YEAR ENDING 30 SEPTEMBER 1981 (cont.)

County	Passenger	Commercial	Trailer	Motorcycle	Total
Kent	246,892	52,427	42,270	14,340	355,929
Keweenaw	954	352	188	55	1,549
Lake	3,620	1,627	973	211	6,431
Lapeer	32,556	11,423	6,780	2,686	53,445
Leelanau	7,275	2,648	1,973	389	12,285
Lenawee	43,887	14,383	9,018	3,159	70,447
Livingston	50,542	13,576	9,003	3,192	76,313
Luce	2,798	1,461	1,040	174	5,473
Mackinac	4,655	2,011	1,367	415	8,448
Macomb	419,093	55,466	41,260	15,248	531,067
Manistee	11,517	3,937	2,667	759	18,880
Marquette	31,999	11,479	5,911	2,708	52,097
Mason	12,888	4,682	3,077	1,123	21,770
Mecosta	13,249	4,852	3,209	872	22,182
Menominee	12,328	4,916	3,151	894	21,289
Midland	40,268	9,182	8,984	2,489	60,923
Missaukee	4,814	2,471	1,397	420	9,102
Monroe	66,025	18,386	12,711	4,400	101,522
Montcalm	22,960	8,678	5,673	1,679	38,990
Montmorency	3,957	1,937	1,268	259	7,421
Muskegon	80,832	19,498	14,631	5,432	120,393
Newaygo	16,056	7,078	4,322	1,519	28,975
Oakland	607,428	88,722	58,552	22,410	777,112
Oceana	9,936	4,375	2,208	762	17,281
Ogemaw	8,522	3,929	2,598	600	15,649
Ontonagon	4,640	2,120	1,224	309	8,293
Osceola	8,664	3,907	2,279	646	15,496
Oscoda	3,654	1,709	1,121	245	6,729
Otsego	7,884	3,200	2,085	544	13,713
Ottawa	83,260	21,115	18,388	5,704	128,467
Presque Isle	6,681	3,064	1,860	456	12,061
Roscommon	9,674	3,473	2,980	613	16,740
Saginaw	116,535	25,479	21,314	5,463	168,791
St. Clair	70,358	18,650	12,542	4,284	105,834
St. Joseph	27,864	10,094	6,122	2,159	46,239
Sanilac	18,943	7,572	4,386	1,585	32,486
Schoolcraft	4,078	1,765	1,199	290	7,332
Shiawassee	34,694	11,366	7,021	2,894	55,975
Tuscola	27,354	11,063	7,495	2,189	48,101
Van Buren	30,802	11,659	5,589	2,139	50,189

TABLE XVII-4. MOTOR VEHICLE REGISTRATION IN MICHIGAN, BY TYPE AND COUNTY: FISCAL YEAR ENDING 30 SEPTEMBER 1981 (cont.)

County	Passenger	Commercial	Trailer	Motorcycle	Total
Washtenaw	135,004	23,898	13,914	6,742	179,558
Wayne	1,173,622	150,498	97,884	36,222	1,458,226
Wexford	12,374	4,405	3,229	860	20,868
Nonresident	25,347	13,381	15,847	154	54,729

SOURCE: Michigan Department of State, special release.

TABLE XVII-5. MOTOR VEHICLE REGISTRATION IN MICHIGAN, BY TYPE: 1975-1980

Type	1975	1976	1977	1978	1979	1980
Passenger	4,598,247	4,681,236	4,890,094	5,126,907	5,162,138	5,220,972
Commercial	857,460	911,734	987,822	1,081,990	1,122,898	1,095,634
Trailer	774,265	760,302	811,224	818,232	775,261	760,533
Motorcycle	288,734	268,938	260,816	242,706	251,210	254,129
Municipal	15,924	69,649	9,571	n.a.	n.a.	n.a.
TOTAL	6,534,630	6,691,859	6,959,527	7,269,835	7,311,507	7,331,268

SOURCE: Michigan Department of State, special release.

n.a.: not available.

TABLE XVII-6. MICHIGAN PASSENGER CAR OPERATORS, BY SEX AND TYPE OF LICENSE: 1976-1980

	Date of computer run				
Sex	6/26/76	7/1/77	7/1/78	7/1/79	7/1/80
Number of master driving records on file (including lapsed)					
Males	3,416,672	3,455,866	3,505,728	3,554,632	3,600,209
Females	2,924,175	2,993,135	3,065,784	3,135,165	3,198,324
Both	6,340,847	6,449,001	6,571,512	6,689,797	6,798,533
Estimated population of active Michigan drivers					
Males	3,200,500	3,238,221	3,273,625	3,323,500	3,341,000
Females	2,849,500	2,911,779	2,976,375	3,026,500	3,059,000
Both	6,050,000	6,150,000	6,250,000	6,350,000	6,400,000
Studied drivers (drivers with valid licenses and/or violations during past year)					
Males	3,057,949	3,100,225	3,151,904	3,188,638	3,202,801
Females	2,723,556	2,787,587	2,858,094	2,903,637	2,927,109
Both	5,781,505	5,887,812	6,009,998	6,092,275	6,129,910
Studied drivers with operator licenses only					
Males	2,450,181	2,471,763	2,505,414	2,519,309	2,523,671
Females	2,671,399	2,731,197	2,797,800	2,839,120	2,859,737
Both	5,121,580	5,202,960	5,303,214	5,358,429	5,383,408
Studied drivers with chauffeur licenses only					
Males	275,173	277,634	286,846	298,150	291,933
Females	19,757	21,991	25,211	28,720	30,373
Both	294,930	299,625	312,057	326,870	322,306
Studied drivers with operator/cycle endorsement					
Males	272,513	285,406	288,789	293,112	304,713
Females	28,816	30,537	30,902	30,895	31,361
Both	301,329	315,943	319,691	324,007	336,074
Studied drivers with chauffeur/cycle endorsement					
Males	50,005	55,455	59,603	64,560	67,344
Females	1,055	1,257	1,432	1,616	1,805
Both	51,060	56,712	61,035	66,176	69,149
Studied drivers with glasses required					
Males	982,547	991,793	1,004,776	1,004,226	1,006,931
Females	1,107,968	1,127,818	1,154,526	1,165,206	1,173,919
Both	2,090,515	2,119,611	2,159,302	2,169,432	2,180,850

TABLE XVII-6. MICHIGAN PASSENGER CAR OPERATORS, BY SEX AND TYPE OF LICENSE: 1976-1980 (cont.)

Sex	Date of computer run				
	6/26/76	7/1/77	7/1/78	7/1/79	7/1/80
Drivers convicted of driving while under influence of liquor in past year[a]					
Males	9,906	9,116	10,329	10,016	11,037
Females	602	654	730	706	856
Both	10,508	9,770	11,059	10,722	11,893
Drivers convicted of impaired (liquor) driving in past year[a]					
Males	21,234	21,284	20,541	20,446	24,997
Females	1,800	1,826	1,844	2,036	2,440
Both	23,034	23,110	22,385	22,482	27,437
Crash drivers rated as having been drinking (to some extent) during past year[a]					
Males	42,856	44,710	45,379	47,415	47,004
Females	5,991	6,479	6,886	7,604	7,560
Both	48,847	51,189	52,265	55,019	54,564
Drivers with no crashes or violation convictions during past year[a]					
Males	2,280,007	2,303,109	2,323,207	2,317,224	2,334,185
Females	2,402,618	2,449,421	2,503,242	2,519,658	2,543,004
Both	4,682,625	4,752,530	4,826,449	4,836,882	4,877,189
Drivers with no crashes during past year[a]					
Males	2,749,101	2,759,106	2,802,971	2,830,130	2,864,414
Females	2,574,242	2,618,152	2,681,703	2,717,143	2,750,987
Both	5,323,43	5,377,258	5,484,674	5,547,273	5,615,401
Drivers with no violation convictions during past year[a]					
Males	2,459,076	2,503,481	2,526,458	2,522,291	2,524,956
Females	2,510,036	2,572,005	2,631,228	2,654,367	2,668,959
Both	4,969,112	5,075,486	5,157,686	5,176,658	5,193,915
Drivers with one crash during past year[a]					
Males	278,546	306,098	313,008	321,[illegible]68	305,568
Females	141,053	159,696	166,178	175,329	166,166
Both	419,599	465,794	479,186	496,797	471,734
Drivers with one violation conviction during past year[a]					
Males	446,833	446,554	460,270	483,612	488,147
Females	185,516	187,439	196,130	213,533	219,400
Both	632,349	633,993	656,400	697,145	707,547

TABLE XVII-6. MICHIGAN PASSENGER CAR OPERATORS, BY SEX AND TYPE OF LICENSE: 1976-1980 (cont.)

	Date of computer run				
Sex	6/26/76	7/1/77	7/1/78	7/1/79	7/1/80
	Drivers with two or more crashes during past year[a]				
Males	30,302	35,021	35,925	37,040	32,819
Females	8,261	9,739	10,213	11,165	9,956
Both	38,563	44,760	46,138	48,205	42,775
	Drivers with two or more violation convictions during past year[a]				
Males	152,040	150,190	165,176	182,735	189,698
Females	28,004	28,143	30,736	35,737	38,750
Both	180,044	178,333	195,912	218,472	228,448

SOURCE: Michigan Department of State, Michigan Driver Statistics, Report No. 13 (Lansing: 1981), pp. 14-20.

a. Calendar years 1976, 1977, 1978, 1979, and 1980, respectively.

TABLE XVII-7. CHARACTERISTICS OF HOLDERS OF MICHIGAN MOTOR VEHICLE OPERATORS' LICENSES: 1980

Item	Males	Females	Total
Overall Michigan Driver Population			
Number of records of drivers 7/1/80	3,600,209	3,198,324	6,798,533
Est. driver population 7/1/80	3,341,000	3,059,000	6,400,000
Studied drivers of record 7/1/80	3,202,801	2,927,109	6,129,910
Median ages of drivers 7/1/80	35	35	35
Accident/violation free drivers 1979	38.1%	41.5%	79.6%
Accident free drivers 1979	46.7%	44.9%	91.6%
Violation free drivers 1979	41.2%	43.5	84.7%
Percentages of drivers of record with the following characteristics			
General 7/1/80			
With original licenses	6.2	5.9	12.0
With operator licenses	41.2	46.7	87.8
With chauffeur licenses	4.8	0.5	5.3
With operator cycle licenses	5.0	0.5	5.5
With chauffeur cycle licenses	1.1	0.03	1.1
Glasses required	16.4	19.2	35.6
Daylight driving only	0.08	0.05	0.14
Handicap restrictions	0.2	0.2	0.4
With 1978 records of:			
Driving on probation	2.47	2.38	4.85
Failed probation	0.29	0.05	0.35
Sent warning letter	3.11	1.06	4.16
Reexamined	1.15	0.13	1.28
Suspended - FAC[a]	1.48	0.44	1.92
Convicted - DUI[b]	0.18	0.01	0.19
Convicted - DWI[c]	0.41	0.04	0.45
Reckless Driving	0.07	0.003	0.07
Careless driving	0.28	0.03	0.32
Driving while license suspended/revoked/denied	0.30	0.02	0.32
Speeding	6.90	2.68	9.59
Speeding, energy speed	2.58	0.75	3.34
Reexamined, first time	0.70	0.11	0.81
Involved in fatal type crash	0.017	0.004	0.022
Involved in bodily injury type crash	1.81	0.96	2.77
Accident with alcohol	0.77	0.12	0.89
Accident with alcohol fatal type	0.005	0.001	0.006
Accident with alcohol bodily injury type crash	0.352	0.062	0.414
Implied consent refusal suspension	0.141	0.012	0.153

SOURCE: Michigan Department of State, Michigan Driver Statistics, Report No.13 (Lansing: 1 July 1981), p. 2.

[a] Failure to appear in court.

[b] Driving under the influence of liquor.

[c] Driving with an impairment (due to liquor).

TABLE XVII-8. PERCENTAGE DISTRIBUTION OF MICHIGAN DRIVERS, BY YEAR OF BIRTH AND SEX: 1980

Year of birth	Males (percentage)	Females (percentage)	Both (percentage)	Age equivalent
1964	1.337[a]	1.210[a]	2.547[a]	15-16[a]
1963	1.354[a]	1.225[a]	2.579[a]	17[a]
1962	1.398[a]	1.228[a]	2.626[a]	18[a]
1961	1.423	1.267	2.690	19
1960	1.428	1.265	2.693	20
1959	1.452	1.321	2.773	21
1958	1.466	1.322	2.788	22
1957	1.489	1.361	2.850	23
1956	1.473	1.365	2.838	24
1955	1.409	1.292	2.701	25
1954	1.387	1.281	2.668	26
1953	1.341	1.238	2.579	27
1952	1.301	1.217	2.518	28
1951	1.281	1.191	2.472	29
1950	1.217	1.143	2.360	30
1949	1.188	1.115	2.303	31
1948	1.175	1.125	2.300	32
1947	1.221	1.167	2.388	33
1946	1.077	1.019	2.096	34
1945	0.891[b]	0.846[b]	1.737[b]	35
1944	0.907	0.854	1.761	36
1943	0.959	0.913	1.872	37
1942	0.942	0.897	1.839	38
1941	0.828	0.787	1.615	39
1940	0.768	0.729	1.497	40
1939	0.731	0.691	1.422	41
1938	0.739	0.703	1.442	42
1937	0.696	0.666	1.362	43
1936	0.673	0.651	1.324	44
1935	0.686	0.653	1.339	45
1934	0.665	0.633	1.298	46
1933	0.630	0.601	1.231	47
1932	0.664	0.634	1.298	48
1931	0.666	0.636	1.302	49
1930	0.711	0.666	1.377	50
1929	0.693	0.653	1.346	51
1928	0.719	0.656	1.375	52

TABLE XVII-8. PERCENTAGE DISTRIBUTION OF MICHIGAN DRIVERS, BY YEAR OF BIRTH AND SEX: 1980 (cont.)

Year of birth	Males (percentage)	Females (percentage)	Both (percentage)	Age equivalent
1927	0.740	0.674	1.414	53
1926	0.719	0.659	1.378	54
1925	0.712	0.661	1.373	55
1924	0.718	0.665	1.383	56
1923	0.688	0.630	1.318	57
1922	0.679	0.615	1.294	58
1921	0.680	0.629	1.309	59
1920	0.633	0.580	1.213	60
1919	0.563	0.529	1.092	61
1918	0.590	0.542	1.132	62
1917	0.547	0.498	1.045	63
1916	0.532	0.475	1.007	64
1915	0.503	0.450	0.953	65
1914	0.491	0.429	0.920	66
1913	0.452	0.391	0.843	67
1912	0.421	0.372	0.793	68
1911	0.371	0.323	0.694	69
1910	0.355	0.316	0.671	70
1909	0.326	0.286	0.612	71
1908	0.310	0.269	0.579	72
1907	0.284	0.240	0.524	73
1906	0.253	0.215	0.468	74
1905	0.238	0.193	0.431	75
1904	0.219	0.172	0.391	76
1903	0.195	0.146	0.341	77
1902	0.175	0.126	0.301	78
1901	0.140	0.099	0.239	79
1900 or before	0.684	0.392	1.076	80 and older
ALL DRIVERS	52.203	47.797	100.000	15-oldest

SOURCE: Michigan Department of State, Michigan Driver Statistics, Report No. 13 (Lansing: 1981), pp. 23-25.

a. Driver population percentages under 19 have been adjusted upward from the actual studied driver percentages of populations to reflect the incidence of active young drivers in Michigan more realistically.

b. Median ages of drivers.

TABLE XVII-9. MOTOR VEHICLE ACCIDENTS AND MILEAGE AND DEATH RATE IN MICHIGAN: 1942-1980

Year	Deaths	Injuries	Accidents	Estimated mileage (millions)	Death rate[a]
1942	1,325	28,967	100,125	13,900.3	9.5
1943	992	21,988	71,450	10,530.0	9.4
1944	1,034	23,401	72,013	10,651.0	9.7
1945	1,150	27,755	83,160	11,915.6	9.7
1946	1,470	34,479	110,531	16,191.1	9.1
1947	1,447	38,195	137,619	17,661.1	8.2
1948	1,512	40,892	140,172	19,069.2	7.9
1949	1,441	41,647	143,197	19,990.4	7.2
1950	1,605	45,734	161,750	21,494.5	7.5
1951	1,640	48,418	176,587	22,668.1	7.2
1952	1,736	49,119	160,829	23,093.1	7.5
1953	1,905	57,834	184,174	25,346.9	7.5
1954	1,793	56,444	185,534	26,041.2	6.9
1955	2,016	62,234	196,812	28,282.5	7.1
1956	1,746	61,158	197,995	28,429.3	6.1
1957	1,548	60,067	191,915	29,252.2	5.3
1958	1,382	57,767	177,934	29,411.3	4.7
1959	1,473	64,873	198,771	30,679.0	4.8
1960	1,604	91,026	209,724	31,842.4	5.0
1961	1,567	93,350	199,973	32,101.5	4.9
1962	1,574	108,143	233,078	34,498.0	4.6
1963	1,887	126,896	261,794	36,452.2	5.2
1964	2,122	144,623	284,444	38,617.6	5.5
1965	2,136	155,258	310,598	40,857.4	5.2
1966	2,298	156,694	302,880	43,940.1	5.2
1967	2,137	151,297	299,004	45,053.6	4.7
1968	2,392	160,413	305,495	48,047.4	5.0
1969	2,487	175,400	331,223	50,904.9	4.9
1970	2,177	161,719	313,715	53,148.1	4.1
1971	2,152	157,664	314,015	55,539.7	3.9
1972	2,258	178,929	359,745	57,817.1	3.9
1973	2,213	169,485	350,864	58,478.4	3.8
1974	1,825	141,132	324,763	55,748.7	3.4
1975	1,811	147,299	333,560	56,260.5	3.2
1976	1,955	162,894	365,600	61,827.4	3.2
1977	1,950	166,389	374,751	64,800.0	3.0
1978	2,076	169,202	389,193	67,375.0	3.1
1979	1,849	162,571	366,435	64,882.0	2.9
1980	1,774	144,972	315,594	61,190.0	2.9

SOURCE: Michigan Department of State Police, Michigan Traffic Accident Facts, 1979 (Lansing: 1980), p. 56 and special release (1980 data).

a. Deaths per 100 million miles of travel.

TABLE XVII-10. NUMBER OF MOTOR VEHICLE TRAFFIC ACCIDENTS, PERSONS KILLED AND PERSONS INJURED, IN MICHIGAN, BY TYPE OF ACCIDENT: 1980

Type of accident	Number of accidents				Number of persons			
						Injured		
	Fatal	Injury	Property damage	Total	Killed	Incapacitated	Nonincapacitated	Possibly[a]
Motor vehicle:								
Overturned	103	5,764	3,655	9,522	108	1,853	3,319	2,672
Other noncollision	16	619	1,000	1,635	16	183	313	221
Motor vehicle collision with:								
Pedestrian	270	4,474	177	4,921	275	1,625	1,799	1,382
Motor vehicle in transport	642	58,493	130,277	189,412	770	10,957	26,230	58,819
Motor vehicle - other roadway	7	70	48	125	8	47	44	63
Parked motor vehicle	19	3,636	27,600	31,255	20	595	2,022	1,943
Railroad train	27	143	222	392	27	66	79	60
Pedalcyclist	62	3,677	542	4,281	63	766	1,833	1,289
Animal	3	547	18,116	18,666	4	76	263	305
Fixed object	429	19,168	33,983	53,580	479	5,251	11,112	3,586
Other object	4	172	629	805	4	29	87	83
TOTAL	1,582	96,763	216,249	314,594	1,774	21,448	47,101	76,423

SOURCE: Michigan Department of State Police, Michigan Traffic Accident Facts, 1979 and special release.

a. No visible injury but complaint of pain or momentary unconciousness.

TABLE XVII-11. NUMBER OF MOTOR VEHICLE TRAFFIC ACCIDENTS, PERSONS KILLED, AND PERSONS INJURED IN MICHIGAN, BY COUNTY: 1980

County	Accidents							Persons	
	Fatal	Injury	Property damage	Inter-state	Local street	State route	Total	Killed	Injured
Alcona	1	87	216	0	185	119	304	1	123
Alger	2	94	240	0	163	173	336	3	149
Allegan	20	706	1,718	118	1,597	729	2,444	27	1,065
Alpena	9	257	718	0	555	429	984	13	395
Antrim	4	150	374	0	323	205	528	4	206
Arenac	5	200	491	61	325	310	696	5	312
Baraga	7	65	249	0	198	123	321	7	112
Barry	11	433	1,188	0	1,110	522	1,632	11	613
Bay	24	1,238	2,744	157	2,397	1,452	4,006	25	1,768
Benzie	6	120	294	0	217	203	420	7	195
Berrien	29	1,577	4,290	708	3,722	1,466	5,896	37	2,309
Branch	8	361	1,065	107	865	462	1,434	9	514
Calhoun	27	1,415	4,140	812	3,625	1,145	5,582	32	2,083
Cass	15	482	1,299	0	1,060	736	1,796	18	722
Charlevoix	2	184	519	0	395	310	705	3	263
Cheboygan	6	216	461	79	373	231	683	6	325
Chippewa	4	239	733	219	623	134	976	7	358
Clare	5	249	806	0	547	513	1,060	5	380
Clinton	14	483	1,294	164	1,140	487	1,791	16	748
Crawford	3	135	351	154	190	145	489	3	197
Delta	11	363	1,050	0	915	509	1,424	14	575
Dickinson	5	204	674	0	428	455	883	6	290
Eaton	15	770	1,770	299	1,260	996	2,555	19	1,117
Emmet	5	289	702	9	519	468	996	5	441
Genesee	77	4,398	9,033	838	9,265	3,405	13,508	83	6,717

TABLE XVII-11. NUMBER OF MOTOR VEHICLE TRAFFIC ACCIDENTS, PERSONS KILLED, AND PERSONS INJURED IN MICHIGAN, BY COUNTY: 1980 (cont.)

County	Accidents							Persons	
	Fatal	Injury	Property damage	Inter-state	Local street	State route	Total	Killed	Injured
Gladwin	3	171	482	0	370	286	656	3	261
Gogebic	5	153	528	0	404	282	686	5	225
Grand Traverse	14	790	1,770	0	1,664	910	2,574	16	1,210
Gratiot	8	353	919	0	733	547	1,280	8	518
Hillsdale	7	356	1,121	0	946	538	1,484	14	541
Houghton	5	288	974	0	458	809	1,267	5	413
Huron	16	320	951	0	680	607	1,287	19	492
Ingham	27	2,712	7,290	1,124	5,886	3,019	10,029	31	3,874
Ionia	11	516	1,542	183	1,352	534	2,069	16	722
Iosco	6	255	810	0	568	503	1,071	7	398
Iron	21	105	413	0	269	251	520	21	158
Isabella	3	406	1,222	0	1,056	575	1,631	3	618
Jackson	25	1,635	4,149	904	3,913	992	5,809	28	2,286
Kalamazoo	42	2,216	6,325	814	6,236	1,533	8,583	44	3,129
Kalkaska	3	128	373	0	267	237	504	3	214
Kent	68	4,603	12,346	756	12,050	4,211	17,017	72	6,637
Keweenaw	1	20	42	0	19	44	63	1	30
Lake	5	104	291	0	253	147	400	5	152
Lapeer	25	628	1,492	0	1,351	794	2,145	26	943
Leelanau	9	124	311	0	223	221	444	9	187
Lenawee	17	821	2,230	0	1,745	1,323	3,068	19	1,254
Livingston	28	884	1,845	462	1,771	524	2,757	31	1,372
Luce	2	54	196	0	126	126	252	2	75
Mackinac	3	122	311	43	173	220	436	3	178
Macomb	98	7,025	12,665	758	13,097	5,933	19,788	106	10,519

TABLE XVII-11. NUMBER OF MOTOR VEHICLE TRAFFIC ACCIDENTS, PERSONS KILLED, AND PERSONS INJURED IN MICHIGAN, BY COUNTY: 1980 (cont.)

	Accidents							Persons	
County	Fatal	Injury	Property damage	Inter-state	Local street	State route	Total	Killed	Injured
Manistee	3	226	682	0	536	375	911	3	312
Marquette	12	656	1,814	0	1,570	912	2,482	14	944
Mason	10	306	832	0	703	445	1,148	10	487
Mecosta	9	354	1,329	0	930	762	1,692	9	511
Menominee	2	226	933	0	683	478	1,161	2	317
Midland	11	680	1,684	0	1,754	621	2,375	11	1,022
Missaukee	5	82	292	0	201	178	379	5	113
Monroe	33	1,295	2,449	290	2,297	1,190	3,777	35	1,888
Montcalm	17	411	1,454	0	1,048	834	1,882	27	640
Montmorency	1	74	235	0	194	116	310	2	117
Muskegon	35	1,662	3,632	462	3,792	1,075	5,329	44	2,495
Newaygo	10	339	970	0	786	533	1,319	12	540
Oakland	142	11,553	22,203	2,339	24,268	7,291	33,898	153	17,457
Oceana	9	209	506	0	528	196	724	11	334
Ogemaw	6	186	557	138	423	188	749	7	272
Ontonagon	1	90	229	0	120	200	320	1	125
Osceola	5	170	671	0	447	399	846	5	246
Oscoda	2	93	299	0	205	189	394	2	135
Otsego	8	151	391	107	320	123	550	8	225
Ottawa	26	1,289	2,966	210	2,933	1,138	4,281	28	1,888
Presque Isle	2	107	366	0	240	235	475	2	153
Roscommon	11	170	531	47	325	340	712	12	258
Saginaw	40	2,808	5,763	411	5,481	2,719	8,611	45	4,330
St. Clair	25	1,257	3,205	161	2,656	1,670	4,487	30	1,977
St. Joseph	14	521	1,388	0	1,006	917	1,923	15	766

TABLE XVII-12. NUMBER OF AIRCRAFT LANDING FACILITIES, ACTIVE PILOTS, AND ACTIVE CIVIL AIRCRAFT IN MICHIGAN: 1 JANUARY 1959-1980

Year	Aircraft landing facilities[a]	Active pilots[b]	Active civil aircraft		
			Air carrier	General aviation	
				Multiengine	All other
1959	187	13,528	4	229	2,600
1960	197	13,272	13	249	2,466
1961	215	12,576	12	295	2,662
1962	216	12,664	25	347	2,785
1963	226	13,030	23	374	2,896
1964	226	13,535	27	421	2,983
1965	235	15,235	34	438	3,047
1966	241	16,830	39	445	3,260
1967	242	19,338	45	550	3,614
1968	251	21,459	53	611	3,983
1969	278	24,214	44	688	4,245
1970	302	25,706	38	721	4,597
1971	305	25,836	--	--	5,526[c]
1972	376	26,152	--	--	5,511[c]
1973	383	26,585	--	--	n.a.
1974	401	24,409	--	--	6,101[c]
1975	403	24,562	--	--	6,216[c]
1976	400	23,822	--	--	6,254[c]
1977	421	n.a.	--	--	n.a.
1978	413	25,317	--	--	7,494[c]
1979	418	25,631	--	--	6,818[c]
1980	413	26,102	--	--	7,912[c]

SOURCE: Federal Aviation Administration, FAA Statistical Handbook of Aviation, 1959 through 1979 (Washinton, D.C.: annually), Tables 3.5 7.12, and 8.6 (1980).

a. Civil and military airports and airfields including seaplane bases and heliports. Only those military airports are included which have joint civil use.

b. Represents active pilot certificates held.

c. Total active civil aircraft.

n.a.: not available.

TABLE XVII-13. NUMBER OF AIRCRAFT LANDING FACILITIES IN MICHIGAN AND THE UNITED STATES, BY LENGTH OF LONGEST RUNWAY: 1 JANUARY 1966 AND 1978 AND 31 DECEMBER 1979

	Length of longest runway, in feet					
Item	Under 3,000	3,000 to 3,999	4,000 to 5,999	6,000 to 9,999	10,000 and over	Total
1 January 1966						
Michigan	128	70	29	6	8	241
United States	5,920	1,686	1,281	405	250	9,542
1 January 1978						
Michigan	277	80	36	16	4	413
United States	8,940	2,503	1,773	641	260	14,117
31 December 1979						
Michigan	276	80	34	18	5	413
United States	9,355	2,600	1,838	641	259	14,693

SOURCE: Federal Aviation Administration, FAA Statistical Handbook of Aviation, 1966 and 1979 (Washington, D.C.: annually), Table 3.4 (1980).
a. Excludes Puerto Rico, Virgin Islands, N. Mariana Isles, and South Pacific.

TABLE XVII-14. SELECTED CHARACTERISTICS OF AIRCRAFT LANDING FACILITIES IN MICHIGAN AND THE UNITED STATES: 1 JANUARY 1966 AND 1978 AND 31 DECEMBER 1979

	1 January 1966		1 January 1978		31 December 1979	
Item	Michigan	United States	Michigan	United States	Michigan	United States[a]
Type of facility						
Airport	234	8,780	390	11,713	384	12,030
Heliport	0	400	15[b]	1,891[b]	19	2,093
Seaplane base	7	362	8	513	8	520
Ownership						
Public	115	3,554	133	4,708	134	4,732
Private	126	5,988	280	9,409	279	9,961
Surface and lighting						
Paved						
Lighted	74	1,965	113	3,564	117	3,695
Not lighted	7	764	19	1,749	23	1,886
Unpaved						
Lighted	27	901	43	919	49	919
Not lighted	133	5,912	238	7,885	224	8,193

SOURCE: Federal Aviation Administration, FAA Statistical Handbook of Aviation, 1966 and 1979 (Washington, D.C.: annually), Tables 3.2 and 3.3 (1979).
a. Excludes Puerto Rico, Virgin Islands, N. Mariana Isles, and South Pacific.
b. Includes short take-off and landing ports.

TABLE XVII-15. NUMBER OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND MAIL, BY CERTIFIED ROUTE AIR CARRIERS FROM AIRPORTS IN MICHIGAN: FOR 12 MONTHS ENDED 31 DECEMBER 1979

Airport	Aircraft departures[a]	Enplaned passengers[b]	Enplaned revenue tons[c]		
			Freight	Express	Mail
Alpena	711	13,344	27.40	.09	.18
Benton Harbor-St. Joseph	1,549	37,552	178.13	0	3.76
Detroit City	1,436	38,633	0	0	0
Detroit Metro	92,350	5,524,637	104,338.68	925.04	23,984.28
Escanaba	2,065	21,775	50.04	0	6.54
Flint	4,752	123,084	118.33	7.71	179.95
Grand Rapids	11,938	468,289	1,464.60	90.77	677.18
Hancock-Houghton	1,044	27,615	82.14	0	15.06
Iron Mountain-Kingsfiel	1,672	17,917	85.19	0	9.41
Ironwood-Ashland	1,361	11,796	9.41	.01	.01
Jackson	1,578	8,628	28.68	.06	9.88
Kalamazoo-Battle Creek	6,692	155,862	398.40	1.64	231.20
Lansing	7,158	220,156	420.27	26.53	547.28
Manistee-Ludington	337	2,890	13.96	0	1.71
Marinette (Wis.)-Menominee	1,702	11,005	41.55	.10	12.63
Marquette	1,064	43,243	85.65	0	13.57
Muskegon	3,422	81,922	345.36	21.91	3.01
Pellston	1,833	32,671	115.66	0	2.42
Saginaw-Bay City-Midland	5,395	219,629	295.52	12.14	122.89
Sault Ste. Marie	786	13,090	19.73	.01	16.74
Traverse City	3,651	98,137	456.60	1.00	14.95
TOTAL	152,496	7,171,875	108,575.20	1,087.01	25,852.65

SOURCE: Federal Aviation Administration, Airport Activity Statistics of Certified Route Air Carriers, 12 months ended 31 December 1979 (Washington, D.C.: 1981), Tables 6 and 7.

a. Aircraft takeoffs made at airports.

b. The number of revenue passengers boarding aircraft, including originating, stopover, and transfer passengers.

c. The number of revenue tons of freight, express, and domestic mail loaded on aircraft, including originating and transfer tons.

TABLE XVII-16. AIRCRAFT OPERATIONS AT FAA-OPERATED AIRPORT TRAFFIC CONTROL TOWERS IN MICHIGAN, BY TYPE OF OPERATION AND AIRCRAFT CATEGORY: FISCAL YEAR ENDED 30 SEPTEMBER 1979

Tower and type of operation	Air carrier	Air taxi	General aviation	Military	Total
Ann Arbor Municipal					
Itinerant operations	0	129	49,605	72	49,806
Local operations	0	0	81,256	38	81,294
Total operations	0	129	130,861	110	131,100
Battle Creek					
Itinerant operations	8,464	934	23,571	4,250	37,219
Local operations	0	0	22,493	2,154	24,647
Total operations	8,464	934	46,064	6,404	61,866
Benton Harbor Ross Field					
Itinerant operations	2,727	121	17,704	71	20,623
Local operations	0	0	14,896	10	14,906
Total operations	2,727	121	32,600	81	35,529
Detroit City					
Itinerant operations	2,880	16,849	116,293	558	136,580
Local operations	0	0	68,244	31	68,275
Total operations	2,880	16,849	184,537	589	204,855
Detroit Metro Wayne Co.					
Itinerant operations	191,534	17,893	75,877	141	285,445
Local operations	0	0	0	0	0
Total operations	191,534	17,893	75,877	141	285,445
Detroit Willow Run					
Itinerant operations	22,482	22,698	58,218	406	103,804
Local operations	0	0	98,921	133	99,054
Total operations	22,482	22,698	157,139	539	202,858
Flint Bishop					
Itinerant operations	10,431	2,116	65,172	536	78,255
Local operations	0	0	96,471	815	97,286
Total operations	10,431	2,116	161,643	1,351	175,541
Grand Rapids					
Itinerant operations	24,093	5,767	73,702	372	103,934
Local operations	0	0	58,003	187	58,190
Total operations	24,093	5,767	131,705	559	162,124
Jackson Reynolds Municipal					
Itinerant operations	3,170	187	48,981	388	52,726
Local operations	0	0	39,454	290	39,744
Total operations	3,170	187	88,435	678	92,470
Kalamazoo					
Itinerant operations	9,472	311	60,176	255	70,214
Local operations	0	0	44,732	302	45,034
Total operations	9,472	311	104,908	557	115,248

TABLE XVII-16. AIRCRAFT OPERATIONS AT FAA-OPERATED AIRPORT TRAFFIC CONTROL TOWERS IN MICHIGAN, BY TYPE OF OPERATION AND AIRCRAFT CATEGORY: FISCAL YEAR ENDED 30 SEPTEMBER 1979 (cont.)

Tower and type of operation	Air carrier	Air taxi	General aviation	Military	Total
Lansing					
Itinerant operations	15,018	5,984	66,678	1,092	88,772
Local operations	0	0	55,817	6,897	62,714
Total operations	15,018	5,984	122,495	7,989	151,486
Muskegon					
Itinerant operations	7,355	1,042	38,166	569	47,132
Local operations	0	0	48,936	616	49,552
Total operations	7,355	1,042	87,102	1,185	96,684
Pontiac					
Itinerant operations	13	5,644	152,624	552	158,833
Local operations	0	0	155,258	202	155,460
Total operations	13	5,644	307,882	754	314,293
Saginaw Tri City					
Itinerant operations	11,326	3,540	39,323	301	54,490
Local operations	0	0	30,096	325	30,421
Total operations	11,326	3,540	69,419	626	84,911
Traverse City					
Itinerant operations	5,406	2,386	40,550	2,686	51,028
Local operations	0	0	49,498	4,707	54,205
Total operations	5,406	2,386	90,048	7,393	105,233
TOTAL					
Itinerant operations	314,371	85,601	9,226,640	12,249	1,338,861
Local operations	0	0	864,075	864,075	670,872
Total operations	314,371	85,601	1,790,715	1,790,715	2,219,643

SOURCE: Federal Aviation Administration, *FAA Air Traffic Activity*, *Fiscal Year 1979* (Washington, D.C.: 1980), Table 4.

NOTE: FAA abbreviates Federal Aviation Agency. An aircraft operation is an arrival or departure. Local operations are performed by aircraft which (1) operate in the local traffic pattern or within sight of the tower, (2) are known to be departing for, or arriving from, flight in local practice areas located within a 20-mile radius of the control tower, or (3) execute simulated instrument approaches or low passes at the airport. All other aircraft arrivals and departures are itinerant operations.

TABLE XVII-17. FREIGHT CARRIED ON THE MICHIGAN GREAT LAKES SYSTEM: 1968-1978

(Thousands of ton-miles)

Waterway and year	Domestic				Foreign		
	Lakewise	Coastwise	Internal	Local and intraport	Canada	Overseas	Total
St. Mary's River							
1968	4,230,317	0	0	0	448,175	118,606	4,797,098
1969	4,834,340	0	0	3	433,949	95,339	5,363,631
1970	4,448,581	0	0	4	391,712	107,370	4,947,667
1971	3,958,115	0	0	2	368,474	187,685	4,514,276
1972	4,123,881	0	0	4	373,351	270,072	4,767,298
1973	4,866,476	0	0	2	628,985	301,654	5,797,117
1974	4,581,604	0	0	3	426,591	136,032	5,144,230
1975	4,037,468	0	0	2	408,454	185,397	4,631,321
1976	4,138,670	0	0	3	329,790	163,517	4,631,980
1977	2,817,806	0	0	1	312,514	250,804	3,381,125
1978	4,481,905	0	0	4	441,441	440,917	5,403,177
Lake Huron							
1968	18,692,708	805	599	3,547	4,170,811	1,700,521	24,568,991
1969	19,650,351	4,541	0	4,059	3,680,506	1,664,949	25,004,406
1970	19,144,416	1,758	2,421	3,177	4,121,310	1,632,218	24,905,300
1971	17,096,864	28	4,573	4,797	3,307,825	2,188,299	22,602,386
1972	17,750,308	98	1,358	5,415	3,321,375	2,351,854	24,430,408
1973	20,161,720	5,206	1,004	5,120	4,155,623	2,429,105	26,757,778
1974	18,811,861	0	1,157	6,121	3,152,382	1,264,686	23,236,207
1975	16,125,686	0	1,333	4,100	3,315,051	1,372,476	20,818,646
1976	17,004,630	0	3,963	4,935	3,962,777	1,548,453	22,424,758
1977	13,135,720	0	8	4,970	3,482,484	2,131,823	18,755,125
1978	14,193,856	0	0	4,658	3,133,157	2,877,062	24,733,079
St. Clair[a]							
1968	4,648,788	272	411	179	968,280	407,519	6,025,449
1969	4,867,509	1,475	0	162	875,971	400,140	6,145,857
1970	4,769,103	618	541	3	1,037,396	390,792	6,198,453
1971	4,231,719	6	1,019	181	821,110	527,556	5,581,591
1972	4,400,660	23	165	0	810,157	582,946	5,783,951

TABLE XVII-11. NUMBER OF MOTOR VEHICLE TRAFFIC ACCIDENTS, PERSON KILLED, AND PERSONS INJURED IN MICHIGAN, BY COUNTY: 1980

	Accidents							Persons	
County	Fatal	Injury	Property damage	Inter-state	Local street	State route	Total	Killed	Injured
Sanilac	8	303	889	0	676	524	1,200	8	474
Schoolcraft	1	71	252	0	132	192	324	1	115
Shiawassee	11	579	1,351	126	1,180	635	1,941	11	864
Tuscola	13	496	1,145	0	999	655	1,654	21	805
Van Buren	14	592	1,374	257	1,269	454	1,980	15	886
Washtenaw	35	2,605	5,442	902	5,297	1,883	8,082	42	3,787
Wayne	308	27,367	52,608	6,156	57,336	16,791	80,283	333	41,603
Wexford	5	331	790	0	468	858	1,126	6	503
TOTAL	1,582	96,763	216,249	20,375	208,410	85,809	314,594	1,774	144,972

SOURCE: Michigan Department of State Police, special release.
pp. 46-47.

TABLE XVII-17. FREIGHT CARRIED ON THE MICHIGAN GREAT LAKES SYSTEM: 1968-1978 (cont.)

(Thousands of ton-miles)

Waterway and year	Domestic				Foreign		
	Lakewise	Coastwise	Internal	Local and intraport	Canada	Overseas	Total
St. Clair[a] (cont.)							
1973	4,908,975	1,790	353	0	1,017,375	594,722	6,523,215
1974	4,485,771	0	407	288	723,164	308,421	5,518,051
1975	3,817,879	0	308	0	771,777	336,978	4,926,942
1976	3,953,856	0	665	0	863,660	376,761	5,194,942
1977	2,986,684	0	0	0	822,731	519,520	4,328,935
1978	4,002,425	0	0	0	904,170	713,787	5,731,495
Detroit River							
1968	2,515,505	1,887	2,088	181	519,844	279,639	3,319,144
1969	2,600,147	2,465	1,346	294	474,135	265,840	3,344,227
1970	2,522,569	1,841	1,451	890	619,962	268,013	3,414,726
1971	2,217,948	1,059	1,388	1,232	506,905	350,251	3,078,783
1972	2,314,157	1,339	1,222	2,315	518,873	368,230	3,206,136
1973	2,553,050	2,455	408	943	635,793	378,045	3,570,694
1974	2,284,291	1,194	273	1,735	454,449	210,510	2,952,452
1975	1,950,195	1,112	268	988	498,614	221,029	2,672,206
1976	2,024,737	1,600	402	794	519,801	253,521	2,800,855
1977	1,529,176	1,159	34	779	520,875	338,756	2,390,779
1978	1,746,932	1,458	37	913	525,507	389,896	3,041,803
Lake Michigan[b]							
1968	14,194,189	2,714	457,119	72,012	3,361,606	1,674,292	19,761,932
1969	15,565,167	2,812	453,322	77,659	2,595,304	1,673,105	20,367,369
1970	15,430,216	1,521	478,793	74,086	2,449,974	1,610,188	20,044,778
1971	13,860,292	1,718	478,677	84,798	2,534,725	1,981,460	18,941,670
1972	14,470,995	1,786	511,197	87,770	2,658,503	1,819,762	19,550,013
1973	15,887,795	2,723	515,078	95,598	2,797,246	1,751,422	21,049,862
1974	16,105,023	2,419	580,506	90,386	2,248,124	1,004,624	20,031,082
1975	14,366,790	913	55,173	72,047	2,193,957	909,835	18,098,715
1976	14,490,026	1,200	460,620	65,835	3,075,673	1,265,525	19,358,885
1977	11,270,889	1,057	421,172	57,984	2,775,846	1,628,324	16,155,272
1978	16,005,560	897	379,215	76,822	2,443,191	1,740,677	20,647,276

SOURCE: U.S. Department of the Army, Corps of Engineers, *Waterborne Commerce of the United States Part 3, Waterways and Harbors--Great Lakes*, 1968 through 1978 (Vicksburg, Mississippi: annually), p. x, Table 1 (1978).

a. Includes St. Clair River and channels in Lake St. Clair.
b. Includes the port of Chicago.

TABLE XVII-18. FREIGHT TRAFFIC ON PRINCIPAL MICHIGAN WATERWAYS: 1972-1978

(In thousands of tons)

Port or waterway	1972	1973	1974	1975	1976	1977	1978
Alabaster	591.2	659.0	409.2	n.a.	561.0	621.7	n.a.
Alpena Harbor	3,380.4	2,853.9	3,082.3	2,855.6	2,835.5	3,004.9	3,203.7
Calcite	12,805.8	14,985.1	14,767.4	1,645.9	11,313.5	11,985.2	11,699.2
Charlevoix	185.5	167.6	157.4	133.1	124.2	42.5	163.2
Cheboygan	114.9	136.0	117.2	78.9	158.0	158.9	134.8
Detroit River	118,991.1	131,676.4	110,515.9	100,419.3	104,551.8	90,576.9	113,031.8
Port of Detroit	29,913.1	31,541.6	27,541.2	26,487.9	26,407.9	25,092.8	25,881.5
Detroit Harbor	11,939.0	13,266.5	11,230.0	11,103.2	10,371.6	7,856.8	9,005.9
Rouge River	11,985.1	13,057.7	12,738.1	10,900.7	11,061.9	12,055.8	11,499.3
Ecorse	737.7	711.8	647.5	715.4	635.6	902.0	726.2
Wyandotte	1,593.6	1,865.4	1,632.7	1,497.9	1,584.3	1,442.2	1,290.6
Trenton	3,060.7	3,230.2	3,496.5	3,120.6	3,059.8	3,131.0	3,704.7
Escanaba	10,954.2	10,250.2	9,685.7	10,876.3	11,934.4	9,506.1	13,207.5
Frankfort Harbor	1,353.1	1,176.5	801.6	644.7	433.1	365.6	542.4
Gladstone	292.0	356.9	230.9	194.1	261.9	232.7	298.8
Grand Haven Harbor and Grand River	2,977.1	2,504.5	2,215.9	1,138.1	830.9	499.5	701.7
Grays Reef Passage	6,808.4	7,887.6	5,741.1	5,467.9	5,899.4	5,378.7	6,562.5
Holland	261.7	448.3	368.9	338.1	338.7	377.1	419.9
Harbor Beach	233.9	201.3	237.4	283.0	296.5	268.3	253.7
Keweenaw Waterway	273.6	229.4	290.3	258.2	236.4	264.2	252.1
Ludington Harbor	3,368.0	2,541.7	2,178.8	2,123.5	2,338.8	2,448.9	2,397.9
Manistee Harbor	522.7	569.3	506.8	220.0	182.5	181.4	183.8
Marquette Harbor	849.2	773.5	1,036.1	1,233.3	572.3	394.3	86.9
Menominee Harbor and River[a]	152.5	185.8	152.4	118.1	105.1	124.2	137.4
Monroe Harbor	30.2	37.4	215.6	1,184.7	972.9	1,321.3	2,374.2
Muskegon Harbor	2,835.8	2,922.7	2,508.1	1,945.3	2,270.8	1,912.4	1,952.5
Petoskey Penn Dixie Harbor	473.1	534.7	501.5	469.0	430.8	485.5	428.9

TABLE XVII-18. FREIGHT TRAFFIC ON PRINCIPAL MICHIGAN WATERWAYS: 1972-1978 (cont.)

(In thousands of tons)

Port or waterway	1972	1973	1974	1975	1976	1977	1978
Port Dolomite	3,263.7	3,711.1	4,437.0	3,608.5	3,457.4	3,798.6	3,633.7
Port Gypsum	341.9	404.8	273.0	382.1	473.9	500.1	631.3
Port Inland	4,199.0	4,367.6	4,324.1	3,248.5	3,361.5	3,469.7	3,585.2
Presque Isle Harbor	3,450.1	3,740.7	3,118.4	3,847.0	6,840.6	5,215.3	7,956.9
Saginaw River	4,386.3	4,096.0	4,180.1	2,705.3	3,072.5	3,656.2	3,173.6
St. Clair River	106,464.6	118,909.8	101,445.4	91,711.3	96,360.2	82,750.5	106,808.5
Port Huron	857.2	364.3	308.1	213.6	244.6	325.9	647.1
Marysville	633.7	606.6	577.7	559.7	516.7	575.9	529.9
St. Clair	3,950.5	3,338.1	3,075.1	2,686.5	3,355.1	4,585.1	3,319.8
Marine City	159.5	252.7	232.5	145.7	187.5	250.9	324.7
Algonac	15.0	0	11.3	18.3	0	7.2	23.8
Channels in Lake St. Clair	105,330.0	117,817.6	99,318.3	88,954.4	92,441.3	77,647.2	102,197.9
St. Joseph Harbor	475.1	465.4	433.1	245.0	295.1	308.4	320.6
St. Mary's River	80,217.2	97,597.3	86,801.4	78,153.5	78,930.7	58,322.0	90,761.6
St. Mary's Falls	77,610.3	94,071.8	83,302.7	75,225.5	76,739.5	56,302.0	88,634.9
Sault Ste. Marie	97.3	109.7	87.5	86.2	95.6	69.9	62.3
Lime Island	85.5	63.0	37.8	56.4	84.4	59.8	95.3
Drummond Island	1,784.1	2,732.8	2,909.6	2,341.1	2,511.4	2,131.6	2,578.4
Detour and vicinity	209.4	221.8	204.5	78.9	14.4	.1	.1
Stoneport	7,707.5	8,673.1	9,859.2	8,533.2	9,766.0	7,991.6	9,217.9
Traverse City Harbor	446.2	422.4	405.2	364.8	398.3	430.7	426.2

SOURCE: U.S. Department of the Army, Corps of Engineers, Waterborne Commerce of the United States, Part 3, Waterways and Harbors--Great Lakes, 1972 through 1978 (Vicksburg, Mississippi: annually), pp. 4-64 (1972).

NOTE: Only waterways which had more than 100,000 tons of traffic in 1974 are listed.

a. Michigan and Wisconsin.

n.a.: not available.

TABLE XVII-19. NUMBER OF REVENUE VEHICLES REPORTED BY THE DETROIT & CANADA TUNNEL CORPORATION, DETROIT INTERNATIONAL BRIDGE COMPANY, MACKINAC BRIDGE AUTHORITY, AND INTERNATIONAL BRIDGE AUTHORITY: 1969-1980

Year	Detroit & Canada Tunnel Corporation	Detroit International Bridge Company	Mackinac Bridge Authority	International Bridge Authority
1969	5,921,565	4,204,805	1,836,383	743,076
1970	5,926,789	4,216,764	1,947,862	759,999
1971	5,863,013	4,408,012	2,090,492	780,222
1972	5,681,152	4,616,461	2,174,664	824,878
1973	5,523,499	4,964,444	2,254,439	868,479
1974	5,405,642	4,973,016	2,138,298	865,814
1975	5,202,331	4,980,587	2,285,784	936,890
1976	5,056,690	5,022,711	2,391,211	957,622
1977	4,968,398	5,238,646	2,460,293	1,059,595
1978	5,392,341	4,956,585	2,539,620	1,118,930
1979	5,250,899	5,348,952	2,293,446	1,076,327
1980	5,875,945	5,971,177	2,260,102	1,216,332

SOURCE: Detroit & Canada Tunnel Corporation, special release; Detroit International Bridge Compoany, special release; Mackinac Bridge Authority, special release; and International Bridge Auhority.

NOTE: The International Bridge Authority links Michigan and Canada at Sault Ste. Marie. Traffic data for the Blue Water Bridge, located at Port Huron and Sarnia, are not available.

The Federal Communications Commission is the leading source of information in the field. Its publication Statistics of Communications Common Carriers gives much detailed information about telephones, radio, and television in the nation and in various states.

The Broadcasting Yearbook of Broadcasting Publications, Inc., lists a considerable amount of information relating to radio and television stations. This volume includes information by states: the facility involved, advertising rates charged, trading area covered, and so forth. Further information concerning Michigan newspapers is available in the Michigan Newspaper Directory and Rate Book of the Michigan Press Association.

Data on plant and customers of each telephone company are available from the records of the Michigan Public Service Commission in the Michigan Department of Commerce. The PSC is responsible for regulating telephone companies and other public utilities.

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TABLE XVIII-1. NUMBER AND CIRCULATION OF DAILY AND SUNDAY NEWSPAPERS IN MICHIGAN: 1964-1974 AND 1976-1979

(Circulation figures in thousands)

Year	Daily newspapers		Sunday newspapers	
	Number	Net paid circulation[a]	Number	Net paid circulation[a]
1964	53	2,384	11	2,081
1965	53	2,353	11	2,040
1966	54	2,410	11	2,093
1967	54	2,492	11	2,167
1968	54	2,435	12	2,085
1969	55	2,415	12	2,080
1970	56	2,512	13	2,189
1971	55	2,447	13	2,187
1972	55	2,510	14	2,245
1973	55	2,569	14	2,276
1974	55	2,527	14	2,269
1976	53	2,453	14	2,225
1977	52	2,457	14	2,237
1978	52	2,458	17	2,366
1979	52	2,458	17	2,363

SOURCE: Bureau of the Census, Statistical Abstract of the United States, 1965 through 1980 (Washington, D.C.: annually), Table 1006 (1980).

a. As of 1 October. Figures for 1975 not available.

n.a. Not available.

TABLE XVIII-2. NUMBER OF COMMERCIAL BROADCAST STATIONS IN MICHIGAN: 1 JANUARY 1964-1974 AND 1976-1979

Year	AM	FM	TV	Total
1964	114	47	16	177
1965	115	51	16	182
1966	116	58	17	191
1967	121	61	17	199
1968	122	67	18	207
1969	124	72	19	215
1970	124	76	20	220
1971	125	78	20	223
1972	125	84	22	231
1973	126	87	21	234
1974	124	92	21	237
1976	128	107	24	259
1977	127	116	24	267
1978	127	109	24	260
1979	128	117	24	269

SOURCE: Bureau of the Census, Statistical Abstract of the United States, 1965 through 1980 Washington, D.C.: annually), Table 996 (1980).

TABLE XVIII-3. MICHIGAN DAILY NEWSPAPERS: 1980

			Circulation[b]	
County	City	Name[a]	Daily	Sunday
Alpena	Alpena	Alpena News	12,995	--
Bay	Bay City	Bay City Times	40,062	44,212
Berrien	Benton Harbor	The Herald-Palladium	35,966	--
	Niles	The Daily Star	62,800	--
Branch	Coldwater	Daily Reporter	8,611	--
Calhoun	Albion	Albion Evening Recorder	16,329	--
	Battle Creek	Battle Creek Enquirer & News	63,366	41,164
	Marshall	Marshall Evening Chronicle	17,169	--
Cass	Dowagiac	Dowagiac Daily News	62,800	--
Cheboygan	Cheboygan	Cheboygan Daily Tribune	4,399	--
Chippewa	Sault Ste. Marie	The Evening News	8,308	--
Delta	Escanaba	Escanaba Daily Press	9,803	--
Dickinson	Iron Mountain	Iron Mountain News	9,705	--
Emmet	Petoskey	Petoskey News-Review	10,983	--
Genesee	Flint	Flint Journal	106,777	106,045
Gogebic	Ironwood	The Ironwood Daily Globe	10,034	--
Grand Traverse	Traverse City	Traverse City Record-Eagle	22,477	--
Hillsdale	Hillsdale	Hillsdale Daily News	15,785	--
Houghton	Houghton	Daily Mining Gazette	24,000	--
Huron	Bad Axe	Huron Daily Tribune	9,283	--
Ingham	Lansing	The State Journal	73,614	80,755
Ionia	Ionia	Ionia Daily Sentinel-Standard	4,422	--
Isabella	Mt. Pleasant	The Morning Sun	7,976	--
Jackson	Jackson	Jackson Citizen Patriot	37,707	41,403
Kalamazoo	Kalamazoo	Kalamazoo Gazette	59,599	66,145
Kent	Grand Rapids	The Grand Rapids Press	125,122	147,360
Lenawee	Adrian	The Daily Telegram	27,433	--
Macomb	Mt. Clemens	The Macomb Daily	107,286	--
Manistee	Manistee	Manistee News-Advocate	29,439	--
Marquette	Marquette	The Mining Journal	17,521	--
Mason	Ludington	Ludington Daily News	8,470	--
Mecosta	Big Rapids	The Pioneer	21,541	--
Menominee	Menominee	The Herald-Leader	24,918	--

TABLE XVIII-3. MICHIGAN DAILY NEWSPAPERS: 1980 (cont.)

County	City	Name[a]	Circulation[b]	
			Daily	Sunday
Midland	Midland	Midland Daily News	17,557	--
Monroe	Monroe	Monroe Evening News	26,770	--
Montcalm	Greenville	The Daily News	7,671	--
Muskegon	Muskegon	The Muskegon Chronicle	44,145	46,589
Oakland	Pontiac	The Oakland Press	74,083	74,549
	Royal Oak	The Daily Tribune	122,429	--
Ottawa	Grand Haven	Grand Haven Tribune	9,921	--
	Holland	Holland Sentinel	18,000	--
Saginaw	Saginaw	Saginaw News	55,713	55,946
St. Clair	Port Huron	The Times Herald	30,823	34,941
St. Joseph	Sturgis	Sturgis Journal	21,586	--
	Three Rivers	Three Rivers Commercial	5,142	--
Shiawassee	Owosso	The Argus-Press	14,789	--
Van Buren	South Haven	South Haven Daily Tribune	3,319	--
Washtenaw	Ann Arbor	Ann Arbor News	42,235	47,347
	Ypsilanti	The Press	15,703	15,549
Wayne	Detroit	Detroit Free Press	546,255	710,018
	Detroit	Detroit Legal News	2,363	--
	Detroit	Detroit News	630,573	827,168
Wexford	Cadillac	Cadillac Evening News	8,433	--

SOURCE: Michigan Press Association, Michigan Newspaper Directory and Rate Book, 1981 (Lansing: 1981), pp. 53-61.

a. This list includes all members of the Michigan Press Association; no information is available for other papers which are not members.

b. Circulation figures are taken from the statement of ownership required by the U.S. Postal Service, Audit Bureau of Circulation, Certified Audit Circulation, and publishers figures.

TABLE XVIII-4. MICHIGAN WEEKLY AND SEMIWEEKLY NEWSPAPERS: 1980

County	City	Name[a]	Circulation[b]
Alcona	Harrisville	Alcona County Review	2,853
	Lincoln	Alcona Co. Herald	2,350
Alger	Munising	Munising News	3,042
Allegan	Allegan	Allegan County News-Gazette	6,714
	Fennville	Fennville Herald	1,374
	Plainwell	The Union-Enterprise	3,459
	Saugatuck	The Commercial Record	2,089
	Wayland	Wayland Globe	3,133
Antrim	Bellaire	Antrim Co. News	48,961
	Central Lake	The Torch	1,973
	Elk Rapids	Elk Rapids Progress	497
	Elk Rapids	Elk Rapids Town Meeting	1,158
Arenac	Standish	Arenac C. Independent	5,645
Baraga	L'Anse	L'Anse Sentinel	7,038
Barry	Freeport	Freeport News	688
	Hastings	Hastings Banner	3,885
	Middleville	Middleville Sun & Caledonia News	1,808
	Nashville	Maple Valley News	3,000
Bay	Bay City	Bay City Democrat & Bay County Legal News	1,155
	Bay City	Bay City Valley Tribune	2,594
	Essexville	Communicator	5,199
	Pinconning	Pinconning Journal	1,620
Benzie	Frankfort	Benzie Co. Record Patriot	27,346
Berrien	Bridgman	The Community Enterprise	1,485
	Berrien Springs	Journal Era	1,890
	Buchanan	Berrien County Record	2,800
	New Buffalo	New Buffalo Times	3,465
	Three Oaks	Galien River Gazette	1,880
	Watervliet	Watervliet Record	2,004
Branch	Bronson	Bronson Journal	1,967
	Union City	The Register-Tribune	1,007
Calhoun	Homer	Homer Index	810
Cass	Cassopolis	Cassopolis Vigilant	62,800
	Edwardsburg	Edwardsburg Argus	62,800
	Marcellus	Marcellus News	1,462
Charlevoix	Boyne City	Charlevoix Co. Press	3,363
	Charlevoix	Charlevoix Courier	3,296
Cheboygan	Cheboygan	Cheboygan Observer	714
	Indian River	Straitsland Resorter	2,467
Clare	Clare	Clare Sentinel	3,312
	Harrison	Clare County Cleaver	3,279
Clinton	Ovid	Maple River News	6,200
	St. Johns	Clinton County News	73,346
Crawford	Grayling	Crawford County Avalanche	3,808
Delta	Gladstone	The Delta Reporter	9,803
Eaton	Bellevue	Bellevue Gazette	600
	Charlotte	Charlotte Republican-Tribune	73,346
	Eaton Rapids	Eaton Rapids Journal	8,500
	Grand Ledge	Grand Ledge Independent	3,333
	Olivet	The Olivet Optic	739
	Sunfield	Sunfield Sentinel	1,173

TABLE XVIII-4. MICHIGAN WEEKLY AND SEMIWEEKLY NEWSPAPERS: 1980 (cont.)

County	City	Name[a]	Circulation[b]
Emmet	Harbor Springs	The Harbor Light	1,502
Genesee	Clio	Clio Messenger	3,049
	Davison	Davison Index	9,200
	Fenton	Fenton Independent	38,304
	Fenton	Tri-County News	23,602
	Flint	Flint-Genesee County Legal News	1,122
	Flint	The Suburban News	25,838
	Flushing	Flushing Observer	38,304
	Grand Blanc	Grand Blanc Evening News	38,304
	Mt. Morris	Genesee Co. Herald	1,875
	Swartz Creek	Swartz Creek News	38,304
Gladwin	Gladwin	Gladwin County Record & Beaverton Clarion	6,143
Gogebic	Wakefield	Wakefield News	1,309
Gratiot	Ithaca	Gratiot County Herald	5,679
	Alma	Reminder News	15,000
Hillsdale	Camden	The Farmer's Advance	24,835
	Jonesville	Jonesville Independent	1,004
Houghton	Calumet	Copper Island Sentinel	7,038
Huron	Harbor Beach	Harbor Beach Times	3,163
	Pigeon	The Progress Advance	15,500
	Port Austin	The Huron News	--
	Sebewaing	Sebewaing Blade-Crescent	3,265
Ingham	East Lansing	Towne Courier	73,346
	Leslie	Leslie Local Independent	1,775
	Mason	Ingham County News	73,346
	Stockbridge	The Town Crier	1,232
	Williamston	The Enterprise	73,346
Ionia	Clarksville	Clarksville Record	600
	Lake Odessa	Lake Odessa Wave	1,914
	Portland	Review & Observer	73,346
Iosco	Oscoda	Oscoda Press	11,798
	Tawas City-East Tawas	Iosco County News	11,798
	Tawas City	Tawas Herald	3,600
Iron	Crystal Falls	Diamond Drill	2,976
	Iron River	Iron River Reporter	4,711
Isabella	Shepherd	The Shepherd Argus	21,742
Jackson	Brooklyn	The Exponent	8,845
	Concord	Concord News	--
	Grass Lake	Grass Lake Public Sentiment	900
	Hanover	Hanover-Horton Local	489
	Jackson	The Blazer	6,000
	Parma	Parma News	584
	Springport	Springport Signal	1,700
Kalamazoo	Climax	Climax Crescent	700
	Galesburg	The Argus	1,218
	Portage	Herald-Headliner	13,000
	Richland	Richland Journal	1,218
	Vicksburg	Vicksburg Commercial-Express	13,500

TABLE XVIII-4. MICHIGAN WEEKLY AND SEMIWEEKLY NEWSPAPERS: 1980 (cont.)

County	City	Name[a]	Circulation[b]
Kalkaska	Kalkaska	Leader & Kalkaskian	48,961
Kent	Cedar Springs	Cedar Springs Clipper	5,692
	East Grand Rapids	Cadence	5,000
	Lowell	The Grand Valley Ledger	2,650
	Rockford	Rockford Register	5,692
	Sparta	North Kent Advance	16,000
	Wyoming	The Southkent News-Wyoming Advocate	--
Lake	Baldwin	Lake County Star	2,851
Lapeer	Almont	Almont Times Herald	8,824
	Almont-Imlay City	Advisor Newspapers	76,417
	Imlay City	Tri-City Times	8,824
	Lapeer	Lapeer County Press	21,781
Leelanau	Leland	Leelanau Enterprise	5,315
Lenawee	Blissfield	Blissfield Advance	2,596
	Clinton	Clinton Local	1,565
	Hudson	Hudson Post-Gazette	2,085
	Morenci	Morenci Observer	4,585
	Tecumseh	Tecumseh Herald	4,600
Livingston	Brighton	The Brighton Argus	62,210
	Fowlerville	The Fowlerville Review	62,210
	Howell	Livingston County Press	62,210
	Pickney	Pickney Post	62,210
Luce	Newberry	Newberry News	2,826
Mackinac	Cedarville	The Weekly Wave	5,900
	St. Ignace	St. Ignace News	5,900
Macomb	Armada	Armada Times	1,390
	Fraser	Clinton Township Advisor	76,417
	Imlay City	Advisor	76,417
	Madison Heights	Reporter	40,500
	New Baltimore	Anchor Bay Beacon	60,190
	Richmond	The Review	19,040
	Romeo	Romeo Observer	4,438
	St. Clair Shores	St. Clair Shores-Roseville-East Detroit Comm News	107,286
	Sterling Heights	Sterling Heights-Utica-Shelby Community News	107,286
	Sterling Heights	Sterling Heights-Utica-Shelby Advisor	76,417
	Warren	Warren-Centerline Comm News	107,286
	Warren	Warren Sterling Reporter	40,500
Manistee	Bear Lake	The Manistee County Pioneer-Press	1,780
Mecosta	Barryton	Chippewa Hills Courier	--
Menominee	Stephenson	Menominee County Journal	3,557
Missaukee	Lake City	Lake City Waterfront, Inc.	4,042
Monroe	Carleton	Messenger	947
	Dundee	Dundee Reporter	1,950
	Lambertville	Courier Herald	19,000
	Petersburg	Pertsburg Sun	1,950

TABLE XVIII-4. MICHIGAN WEEKLY AND SEMIWEEKLY NEWSPAPERS: 1980 (cont.)

County	City	Name[a]	Circulation[b]
Montcalm	Carson City	Carson City Gazette	2,054
	Edmore	Edmore Times	4,700
	Howard City	Howard City Record	11,462
	Lakeview	Lakeview Enterprise	3,369
Montmorency	Atlanta	Montmorency County Tribune	4,500
Muskegon	Montague	White Lake Observer	10,492
	Norton Shores	Norton Examiner	11,000
Newaygo	Fremont	Fremont Times-Indicator	7,842
	Newaygo	Newaygo County Sun	--
Oakland	Birmingham	Birmingham Eccentric	19,368
	Clarkston	Clarkston News	4,074
	Farmington	Farmington Observer	15,741
	Ferndale	Legal Advisor-Oakland County	1,025
	Holly	N.W. Oakland County Herald-Advertiser	1,800
	Lake Orion	Lake Orion Review	2,996
	Milford	Milford Times	62,210
	Milford	Milford-Highland Spinal Column	52,598
	Novi	Novi-Commerce Spinal Column	52,598
	Novi	Novi-Walled Lake News	62,210
	Oxford	Oxford Leader	2,643
	Pontiac	Oakland County Legal News	1,411
	Pontiac	Waterford Times	50,000
	Rochester	Rochester Clarion	7,477
	Rochester	Rochester Eccentric	7,971
	Southfield	Southfield Eccentric	15,303
	South Lyon	The Herald	62,210
	Troy	The Eccentric	8,516
	Troy	Troy-Clawson Reporter	40,500
	Union Lake	Spinal Column	52,598
	West Bloomfield	West Bloomfield Spinal Column	52,598
	West Bloomfield	The Eccentric	4,268
Oceana	Hart	Hart Journal	4,223
	New Era	The Oceana County News	5,564
	Shelby	Oceana Herald	3,161
Ogemaw	West Branch	Ogemaw County Herald	40,200
Ontonagon	Ontonagon	Ontonagon Herald	3,115
Osceola	Evart	Evart Review	3,140
	Marion	Marion Press	1,274
	Reed City	Osceola County Herald	19,498
Oscoda	Mio	Oscoda County News	3,000
Otsego	Gaylord	The Herald-Time	5,338
Ottawa	Grand Haven	Western Michigan News Review	6,203
	Zeeland	Zeeland Record	2,008

TABLE XVIII-4. MICHIGAN WEEKLY AND SEMIWEEKLY NEWSPAPERS: 1980 (cont.)

County	City	Name[a]	Circulation[b]
Presque Isle	Onaway	Onaway Outlook	5,791
	Rogers City	Presque Isle County Advance	5,791
Roscommon	Houghton Lake	Houghton Lake Resorter	5,874
	Roscommon	Roscommon Herald-News	39,065
Saginaw	Birch Run	Birch Run-Banner	23,400
	Bridgeport	Future Views	23,400
	Chesaning	Saginaw Valley News	14,650
	Frankenmuth	Frankenmuth News	4,200
	Merrill	Valley News	23,400
	Saginaw	Saginaw Press	1,959
	Saginaw	Township Times	6,542
St. Clair	Algonac	Courier-Journal	19,040
	Capac	Capac Journal	8,824
	Marine City	St. Clair County Independent Press	19,040
	Yale	Yale Expositor	1,987
St. Joseph	Colon	The Express	1,006
	White Pigeon	St. Joseph County News	2,345
Sanilac	Brown City	Brown City Banner	5,111
	Carsonville	Carsonville-Pt. Sanilac Journal	1,794
	Croswell	Sanilac Jeffersonian	8,000
	Deckerville	Deckerville Recorder	1,839
	Marlette	Marlette Leader	2,180
	Minden	Minden City Herald	1,518
	Sandusky	Sandusky Republican Tribune	3,600
	Sandusky	Sanilac County News-Advisor	3,650
Schoolcraft	Manistique	Manistique Pioneer-Tribune	3,990
Shiawassee	Durand	Durand Express	2,427
	Perry	Shiawassee County Journal	2,051
Tuscola	Caro	Tuscola County Advertiser	12,221
	Cass City	Cass City Chronicle	3,570
	Mayville	Mayville Monitor	1,255
	Millington	Millington Herald-Lakeville Aerial	2,200
	Vassar	Pioneer Times	8,700
Van Buren	Bangor	Bangor Advance	5,069
	Decatur	Decatur Republican	1,850
	Gobles	Gobles News	1,100
	Paw Paw	The Courier-Leader	15,185
Washtenaw	Chelsea	Chelsea Standard	3,769
	Dexter	Dexter Leader	2,755
	Manchester	Manchester Enterprise	1,564
	Milan	The Milan Booster-Leader	2,940

TABLE XVIII-4. MICHIGAN WEEKLY AND SEMIWEEKLY NEWSPAPERS: 1980 (cont.)

County	City	Name[a]	Circulation[b]
Wayne	Allen Park	Allen Parker	60,050
	Belleville	Belleville Enterprise and Legal Times	42,863
	Canton Twp.	Canton Eagle	42,863
	Canton Twp.	Canton Observer	9,501
	Dearborn	Dearborn Press and Guide	33,750
	Dearborn Heights	Dearborn Heights Leader	33,750
	Ecorse	Ecorse Advertiser	14,400
	Ecorse	Ecorse Enterprise	66,050
	Flat Rock	The Guardian	7,000
	Garden City	Garden City Observer	9,400
	Grosse Ile	The Downriver News Herald	44,100
	Grosse Pointe Farms	Grosse Pointe News	17,100
	Hamtramck	The Citizen	12,975
	Inkster	Ledger Star	42,863
	Lincoln Park	Lincoln Parker	66,050
	Livonia	Livonia Observer	28,346
	Melvindale	Melvindale Messenger	66,050
	Northville	The Record	62,210
	Plymouth	The Community Crier	20,147
	Plymouth	Plymouth Observer	9,034
	Redford	Redford Observer	10,240
	River Rouge	River Rouge Herald	14,400
	Riverview	The News-Herald	44,100
	Romulus	Romulus Roman	42,863
	Southgate	Southgate Sentinel	66,050
	Taylor	Taylor Tribune	66,050
	Trenton	Trenton News-Herald	44,100
	Trenton	Trenton Times	10,125
	Wayne	Wayne Eagle	42,863
	Westland	Westland Eagle	42,863
	Westland	Westland Observer	8,755
	Woodhaven	The News-Herald	44,100
	Wyandotte	Wyandotte News Herald	44,100

SOURCE: Michigan Press Association, Michigan Newspaper Directory and Rate Book, 1981 (Lansing: 1981), pp. 64-91.

a. This list includes all members of the Michigan Press Association; no information is available for other papers which are not members.

b. Circulation figures are taken from the statement of ownership required by the U.S. Postal Service, Audit Bureau of Circulation, Certified Audit Circulation, and figures supplied by publishers.

TABLE XVIII-5. MICHIGAN TELEVISION STATIONS: 1979

City and call letters	Channel	On air	Major network affiliation	Effective radiated power (kilowatts)	
				Visual	Aural
Alpena					
WBKB-TV	11	1975	CBS	316	63.2
*WCML-TV	6	1975	Ind.	100	15.1
Ann Arbor					
WRHT	31	(a)	n.a.	1,096	217.0
Battle Creek					
WUHQ-TV	41	1971	ABC	1,380	138.0
Bay City					
WNEM-TV	5	1954	NBC	100	20.0
Cadillac					
WWTV	9	1954	CBS	316	51.3
Cheboygan					
WTOM-TV	4	1959	NBC[b]	100	20.0
Detroit					
CBET	9	1954	CBC[c]	325	65.0
WGPR-TV	62	1975	Ind.	759	75.9
WJBK-TV	2	1948	CBS	100	10.0
WKBD-TV	50	1965	Ind.	2,090	209.0
*WTVS	56	1955	PBS	617	61.7
WWJ-TV	4	1947	NBC	98	9.7
WXON	20	1968	Ind.	501	50.1
WXYZ-TV	7	1948	ABC	316	31.6
East Lansing					
*WKAR-TV	23	1972	PBS	1,100	219.0
Escanaba					
WJMN-TV	3	1969	NBC	100	20.0
Flint					
WJRT-TV	12	1958	ABC	316	31.6
Grand Rapids					
*WGVC	35	1972	PBS	1,000	200.0
WOTV	8	1949	NBC	282	56.2
WZZM-TV	13	1962	ABC	295	63.0
Jackson					
WWLD-TV	18	(a)	n.a.	1,084	214.0
Kalamazoo					
WKZP-TV	3	1950	CBS	100	20.0
Lansing					
WJIM-TV	6	1950	CBS	100	20.0

TABLE XVIII-5. MICHIGAN TELEVISION STATIONS: 1979 (cont.)

City and call letters	Channel	On air	Major network affiliation	Effective radiated power (kilowatts) Visual	Aural
Marquette					
WLUC-TV	6	1956	CBS	100	20.0
*WNMU-TV	13	1972	PBS	316	63.1
Mount Pleasant					
*WCMU-TV	14	1967	PBS	39.8	7.9
Onondaga					
WILX-TV	10	1959	NBC	309	61.7
Saginaw					
WEYI-TV	25	1953	CBC[c]	4,070	40.7
Sault Ste. Marie					
WGTO	8	n.a.	ABC[d]	316	163.6
WWUP-TV	10	1962	CBS[e]	253	50.5
Traverse City					
WGTU	29	1971	ABC	1,000	200.0
WPBN-TV	7	1954	NBC	316	63.2
University Center					
*WUCM-TV	19	1964	PBS	562	56.2

SOURCE: Broadcasting Publications, Inc., Broadcasting Yearbook, 1979 (Washington, D.C.: 1979), pp. B-110 to B-112.

a. Not on the air yet.

b. Satellite of WPBN-TV Traverse City.

c. Windsor, Ontario, Canada.

d. Satellite of WGTU-TV Traverse City.

e. Satellite of WWTV Cadillac.

*: noncommercial stations.

n.a.; not available.

TABLE XVIII-6. MICHIGAN RADIO STATIONS: 1979

City and call letters	On air	Operating frequency	Operating schedule	Power (watts)
Adrian				
WABJ	1946	1490 kHz	24 hr.	(a)
WQTE (FM)	1976	95.3 MHz (S)	n.a	3,000
WLEN (FM)	1965	103.9 MHz	24 hr.	3,000
*WVAC (FM)	1967	88.1 MHz		10
Albion				
WALM	1952	1260 kHz	5:30am-12	(b)
WUFN (FM)	1971	96.7 MHz	n.a.	1,200
Allendale				
*WSRX (FM)	1974	88.5 MHz	n.a.	10
Alma				
WFYC	1948	1280 kHz	6am-LSS	1,000
WFYC-FM	1965	104.9 MHz	6am-11:15pm (Sat.-Sun.)	3,000
Alpena				
WATZ	1946	1450 kHz	6am-11:15pm	(a)
WATZ-FM	1967	93.5 MHz	6am-11:15pm	3,000
WCML-FM	1978	91.7 MHz	n.a.	
WHSB (FM)	1965	107.7 MHz	5:30am-11:30	100,000
Ann Arbor				
WAAM	1947	1600 kHz	24 hr.	5,000
*WCBN (FM)	1972	88.3 MHz (S)	n.a.	10
WIQB (FM)	1962	102.9 MHz (QS)	24 hr.	10,000
WPAG	1945	1050 kHz	6am-LSS	5,000
WPAG-FM	1969	107.1 MHz	6am-1am	3,000
*WUOM (FM)	1948	91.7 MHz	n.a.	230,000
Auburn Heights				
*WAHS (FM)	1975	89.5 MHz	n.a.	10
Bad Axe				
WLEW	1950	1340 kHz	5:30am-11:15pm	(a)
WLEW-FM	1956	92.1 MHz	5:30am-11:15pm	3,000
Battle Creek				
WBCK	1948	930 kHz	5:30-1am	(c)
WKNR	1925	1400 kHz	5am-1am	(a)
WKFR-FM	1963	103.3 MHz (S)	5am-1am	31,000
WWKQ	1963	1500 kHz	LSR-LSS	1,000
WDFP (FM)	1975	95.3 MHz (S)	5am-12m	3,000
Bay City				
WRDD	1925	1440 kHz	5am-2am	1,000
*WCHW (FM)	1973	91.3 MHz	n.a.	10
WGER (FM)	1961	102.5 MHz (S)	24 hr.	86,000
WHNN (FM)	1960	96.1 MHz	24 hr.	97,000
WXOX	1956	1250 kHz	6am-LSS	1,000

TABLE XVIII-6. MICHIGAN RADIO STATIONS: 1979 (cont.)

City and call letters	On air	Operating frequency	Operating schedule	Power (watts)
Benton Harbor				
WHFB	1947	1060 kHz	LSR-LSS	5,000
WHFB (FM)	1947	99.9 MHz (S)	5:30am-1	9,200
Berrien Springs				
*WAUS (FM)	1971	90.9 MHz	n.a.	17,000
Big Rapids				
WBRN	1953	1460 kHz	6am-LSS	1,000
WBRN (FM)	1964	100.9 MHz	6am-10pm	3,000
Birmingham				
WMJC (FM)	1958	94.7 (S)	n.a.	10,000
Bloomfield Hills				
*WBFH (FM)	1976	88.1	n.a.	10
Boyne City				
WCLX (FM)	1978	93.5 MHz	n.a.	1,200
Cadillac				
WATT	1945	1240 kHz	5:15am-12:15am	(a)
WITW (FM)	1974	96.7 MHz (S)	6am-12m	1,350
WKJF (FM)	1961	92.9 MHz (S)	6am-12m	100,000
WWAM	1968	1370 kHz	6am-12m	(c)
Caro				
WKYO	1962	1360 kHz	6am-LSS	500
WIDL (FM)	1974	104.9 kHz	6am-11pm	3,000
Charlevoix				
WVOY	1974	1270 kHz	6am-LSS	5,000
Charlotte				
WCER	1956	1390 kHz	6am-LSS	5,000
WCER (FM)	1965	92.7 MHz	6am-11pm	3,000
Cheboygan				
WCBY	1954	1240 kHz	6am-11pm	1,000
WCBY (FM)	1968	105.1 MHz	n.a.	25,000
Clare				
WRNN	1960	990 kHz	LSR-LSS	250
WRNN (FM)	1967	95.3 MHz	LSR-10:30pm	3,000
Coldwater				
WTVB	1949	1590 kHz	5am-1am	(c)
WNWN (FM)	1950	98.5 MHz	5am-12m	50,000
Dearborn				
WWKR	1946	1310 kHz	24 hr.	5,000
WNIC (FM)	1950	100.3 MHz	24 hr.	50,000

TABLE XVIII-6. MICHIGAN RADIO STATIONS: 1979 (cont.)

City and call letters	On air	Operating frequency	Operating schedule	Power (watts)
Detroit (Windsor, Ont.)				
CKLW	1932	800 kHz	24 hr.	50,000
Detroit				
WABX (FM)	1960	99.5 MHz (S)	24 hr.	36,000
WBFG (FM)	1961	98.7 MHz (S)	24 hr.	50,000
WCAR	1939	1130 kHz	24 hr.	(d)
WTWR (FM)	1964	92.3 MHz	5am-12pm	10,000
WDEE	1925	1500 kHz	24 hr.	(e)
*WDET (FM)	1948	101.9 MHz	n.a.	79,000
WDRQ (FM)	1947	93.1 MHz	24 hr.	20,000
*WDTR (FM)	1948	90.9 MHz	n.a.	17,000
WGPR (FM)	1961	107.5 MHz	24 hr.	50,000
WJLB	1926	1400 kHz	24 hr.	(a)
WJR	1922	760 kHz	24 hr.	50,000
WJR (FM)	1948	96.3 MHz (S)	24 hr.	50,000
WJZZ (FM)	1960	105.9 MHz	24 hr.	34,000
WCZY (FM)	1949	95.5 MHz (S)	6am-2am	(f)
WMUZ (FM)	1959	103.5 MHz	24 hr.	115,000
WMZK (FM)	1941	97.9 MHz	24 hr.	50,000
WOMC (FM)	1948	104.3 MHz (S)	24 hr.	190,000
WQRS (FM)	1960	105.1 MHz (S)	7am-1am	50,000
WRIF (FM)	1948	101.1 MHz (S)	24 hr.	27,200
WWJ	1920	950 kHz	24 hr.	5,000
WWJ (FM)	1941	97.1 MHz (S)	24 hr.	12,000
WWWW (FM)	1960	106.7 MHz (QS)	24 hr.	61,125
WXYZ	1925	1270 kHz	24 hr.	5,000
Dowagiac				
WDOW	1960	1440 kHz	6am-LSS	1,000
WDOW (FM)	1971	97.7 MHz	6am-12pm	3,000
Drayton Plains				
*WTSD (FM)	1972	88.1 MHz (S)	n.a.	10
East Lansing				
WFMK (FM)	1959	99.1 MHz (S)	24 hr.	28,000
*WKAR	1922	870 kHz	n.a.	(g)
*WKAR (FM)	1948	90.5 MHz	n.a.	125,000
WVIC	1965	730 kHz	6am-LSS	500
WVIC (FM)	1963	94.9 MHz (S)	24 hr.	20,000
Elsie				
WOES (FM)	1978	91.3 MHz	n.a.	10
Escanaba				
WBDN	1958	600 kHz	6am-LSS	1,000
WDBC	1941	680 kHz	5:30am-12m	(h)
WKZY (FM)	1976	97.1 MHz	n.a.	89,800
WFNN (FM)	1977	104.7 MHz	n.a.	100,000
Farmington Hills				
WORB (FM)	N.O.A.	90.3 MHz	n.a.	10
Flint				
WAMM	1955	1420 kHz	6am-LSS	500
WLQB	1946	1570 kHz	6am-LSS	1,000
*WFBE (FM)	1953	95.1 MHz	n.a.	3,700

TABLE XVIII-6. MICHIGAN RADIO STATIONS: 1979 (cont.)

City and call letters	On air	Operating frequency	Operating schedule	Power (watts)
Flint (cont.)				
WFDF	1922	910 kHz	4:45am-1am	(c)
WGMZ (FM)	1962	107.9 MHz (S)	24 hr.	50,000
WKMF	1953	1470 kHz	24 hr.	(c)
WTAC	1946	660 kHz	24 hr.	(b)
WTRX	1947	1330 kHz	24 hr.	(c)
WWCK (FM)	1964	105.5 MHz (S)	24 hr.	3,000
Fremont				
WSHN	1961	1550 kHz	6am-LSS	1,000
WSHN (FM)	1971	100.1 MHz	5:55am-11pm	3,000
Garden City				
WIID	1963	1090 kHz	6am-LSS	250
Gaylord				
WATC	1950	900 kHz	6am-LSS	1,000
WWRM (FM)	1972	106.7 MHz (S)	5:45am-12m	50,000
WPOL (FM)	N.O.A.	95.3 MHz	n.a.	1,800
Gladwin				
WJEB	1974	1350 kHz	6am-LSS	1,000
WGMN (FM)	N.O.A.	103.1 MHz	n.a.	3,000
Grand Haven				
WGHN	1956	1370 kHz	6am-LSS	500
WFMG (FM)	1969	92.1 MHz (S)	6am-12m	3,000
Grand Rapids				
*WCSG (FM)	1973	91.3 MHz (S)	n.a.	20,000
WEHB (FM)	1978	89.9 MHz	n.a.	300
WFUR	1947	1570 kHz	6am-LSS	1,000
WFUR (FM)	1960	102.9 MHz (S)	5:30am-1am	40,000
WGRD	1947	1410 kHz	6am-LSS	1,000
WGRD (FM)	1962	97.9 MHz (S)	24 hr.	19,000
WCUZ	1945	1230 kHz	4:45am-1am	(a)
WJFM (FM)	1954	93.7 MHz	6am-3am	500,000
WLAV	1940	1340 kHz	24 hr.	(a)
WLAV (FM)	1947	96.9 MHz (S)	24 hr.	28,000
WMAX	1954	1480 kHz	6am-LSS	5,000
WOOD	1924	1300 kHz	5am-1am	5,000
WOOD (FM)	1962	105.7 MHz (S)	24 hr.	265,000
*WVGR (FM)	1961	104.1 MHz	n.a.	107,500
WFFX (FM)	1965	101.3 MHz (S)	24 hr.	50,000
WZZR (FM)	1962	95.7 MHz (S)	24 hr.	50,000
Grayling				
WGRY	1970	1590 kHz	6am-LSS	1,000
WOON	1978	100.1 MHz	n.a.	3,000
Greenville				
WPLB	1960	1380 kHz	5am-12m	(b)
WPLB (FM)	1962	107.3 MHz (S)	7:30am-12m	50,000

TABLE XVIII-6. MICHIGAN RADIO STATIONS: 1979 (cont.)

City and call letters	On air	Operating frequency	Operating schedule	Power (watts)
Hancock				
WMPL	1957	920 kHz	6am-LSS	1,000
WMPL (FM)	1966	93.5 MHz	6am-12m	3,000
Harrison				
WKKM	1975	92.1 MHz	6am-10pm	3,000
Hastings				
WBCH	1957	1220 kHz	6am-LSS	250
WBCH (FM)	1968	100.1 MHz	6am-11pm	1,550
Highland Park				
*WHPR (FM)	1954	88.1 MHz	n.a.	10
Hillsdale				
WCSR	1955	1340 kHz	6am-12m	(j)
Holland				
WHTC	1948	1450 kHz	5am-12m	(a)
WHTC (FM)	1963	96.1 MHz (S)	3pm-10:15pm	41,000
WJBL	1956	1260 kHz	6am-LSS	5,000
WJBL (FM)	1961	94.5 MHz (S)	6am-12m	10,000
Houghton				
*WGGL (FM)	1968	91.1 MHz (S)	n.a.	100,000
WHDF	1929	1400 kHz	6am-10:30pm	(a)
Houghton Lake				
WHGR	1954	1290 kHz	6am-12m	5,000
WJGS (FM)	1961	98.5 MHz (S)	6am-12m	100,000
Howell				
WHMI	1957	1350 kHz	6am-LSS	500
WHMI (FM)	1977	93.5 MHz	n.a.	3,000
Inkster				
WCHB	1956	1440 kHz	24 hr.	(b)
Interlochen				
*WIAA (FM)	1963	88.3 MHz	n.a.	115,000
Ionia				
WION	1953	1430 kHz	6am-LSS	5,000
Iron Mountain				
WMIQ	1947	1450 kHz	6am-11pm	(a)
WJNR (FM)	1972	103.9 MHz	6am-12m	560
Iron River				
WIKB	1949	1230 kHz	6am-10pm (8am-10pm Sun.)	(a)

TABLE XVIII-6. MICHIGAN RADIO STATIONS: 1979 (cont.)

City and call letters	On air	Operating frequency	Operating schedule	Power (watts)
Ironwood				
WJMS	1931	590 kHz	6an-12m	(c)
WIMI (FM)	1975	99.7 MHz	n.a.	100,000
WUPM (FM)	1978	106.9 MHz	n.a.	25,000
Ishpeming				
WJPD	1947	1240 kHz	5:55am-12m	(a)
WJPD (FM)	1975	92.3 MHz (S)	5:55am-12m	100,000
WUPY	1959	970 kHz	6am-LSS	5,000
WMQT (FM)	1974	107.1 MHz	n.a.	540
Jackson				
WHFI (FM)	1958	94.1 MHz (S)	24 hr.	50,000
WIBM	1926	1450 kHz	24 hr.	(a)
WJCO	1963	1510 kHz	LSR-LSS	5,000
WKHM	1951	970 kHz	24 hr.	1,000
WJOX (FM)	1963	106.1 MHz	24 hr.	20,000
Kalamazoo				
*WIDR (FM)	1975	89.1 MHz	n.a.	10
WKMI	1947	1360 kHz	24 hr.	(c)
WKPR	1960	1420 kHz	6am-LSS	1,000
WKZO	1923	590 kHz	5:30am-1:05am	5,000
*WMUK (FM)	1951	102.1 MHz	n.a.	50,000
WQLK (FM)	1964	106.5 MHz (S)	24 hr.	40,000
WYYY	1956	1470 kHz	6am-LSS	500
Kentwood				
WKWM	1978	1140 kHz	n.a.	(k)
Lansing				
WILS	1946	1320 kHz	24 hr.	(c)
WILS (FM)	1967	101.7 MHz	24 hr.	3,000
WITL	1961	1010 kHz	LSR-LSS	500
WITL (FM)	1961	100.7 MHz	24 hr.	55,000
WJIM	1934	1240 kHz	24 hr.	(a)
WJIM (FM)	1960	97.5 MHz	6:45am-12m (7:30am-12m Sat. & Sun.)	28,000
Lapeer				
WMPC	1926	1230 kHz	n.a.	(a)
WTHM	1962	1530 kHz	LSR-LSS	5,000
WTHM (FM)	1968	103.1 MHz	6am-9pm	3,000
Ludington				
WKLA	1944	1450 kHz	7am-10pm	(a)
WKLA (FM)	1971	106.3 MHz (S)	7am-10pm	3,000
Manistee				
WMTE	1951	1340 kHz	5am-12m	(a)
WRRK (FM)	1970	97.7 MHz	5am-12m	3,000

TABLE XVIII-6. MICHIGAN RADIO STATIONS: 1979 (cont.)

City and call letters	On air	Operating frequency	Operating schedule	Power (watts)
Manistique				
WTIQ	1965	1490 kHz	6am-10pm	(a)
Marine City				
WSMA	1951	1590 kHz	6am-LSS	1,000
Marquette				
WDMJ	1931	1320 kHz	5:50am-12m	1,000
WHWL (FM)	1965	95.7 MHz (S)	5:50am-12m	100,000
*WNMU (FM)	1963	90.1 MHz	n.a.	100,000
WUUN	1974	100.1 MHz	24 hr.	3,000
Marshall				
WELL (FM)	1968	104.9 MHz	n.a.	3,000
Mason				
WUNN	1967	1110 kHz	n.a.	(1)
Menominee				
WAGN	1952	1340 kHz	5:55am-10:30pm	(a)
Midland				
WMPX	1948	1490 kHz	24 hr.	(a)
WRCI (FM)	1976	93.5 MHz (S)	n.a.	3,000
WVGN (FM)	1961	99.7 MHz (S)	n.a.	100,000
Monroe				
WHND	1956	560 kHz	6am-LSS	500
WVMO (FM)	1967	98.3 MHz	5:43am-12:05am	3,000
WEJY	N.O.A.	89.5 MHz	n.a.	10
Mount Clemens				
WBRB	1956	1430 kHz	5am-LSS	500
WBRB (FM)	1960	102.7 MHz	5am-1am (5am-2am Sat.) (7am-12m Sun.)	17,000
Mt. Pleasant				
WCEN	1949	1150 kHz	5:45am-11:15pm	1,000
WCEN (FM)	1963	94.5 MHz	5:40am-11:15pm	16,000
*WCMU (FM)	1964	89.5 MHz	n.a.	100,000
*WMHW (FM)	1972	91.5 MHz	n.a.	32
Munising				
WQOX	1956	1400 kHz	6am-10pm	(a)
WQOX (FM)	1974	98.3 MHz	6am-10pm	1,000
Muskegon				
WKBZ	1926	850 kHz	5:30am-12m	1,000
WMUS	1947	1090 kHz	LSR-LSS	1,000
WMUS (FM)	1962	106.9 MHz (S)	5:30am-12m	31,000
WTRU	1949	1600 kHz	5:30am-12:30am	5,000
WQWQ (FM)	1971	104.5 MHz (S)	24 hr.	50,000

TABLE XVIII-6. MICHIGAN RADIO STATIONS: 1979 (cont.)

City and call letters	On air	Operating frequency	Operating schedule	Power (watts)
Muskegon Heights				
WKJR	1963	1520 kHz	LSR-LSS	10,000
WKJR (FM)	1974	101.7 MHz	6am-12m	3,000
Newberry				
WNBY	1966	1450 kHz	6am-10pm	1,000
WNBY (FM)	1977	93.5 MHz	n.a.	3,000
Niles				
WNIL	1956	1290 kHz	6am-LSS	500
WAOR (FM)	1968	95.3 MHz	n.a.	3,000
Novi				
WOVI (FM)	1978	89.5 MHz	n.a.	10
Oak Park				
*WOPR (FM)	1974	90.3 MHz	n.a.	19
Olivet				
*WOCR (FM)	1975	89.7 MHz	n.a.	10
Orchard Lake				
*WBLD (FM)	1974	89.3 MHz (S)	n.a.	10
Otsego				
WAOP	1962	980 kHz	6am-LSS	1,000
Owosso				
WOAP	1947	1080 kHz	LSR-LSS	1,000
WOAP (FM)	1965	103.9 MHz	n.a.	2,800
Petoskey				
WJML	1966	1110 kHz	LST-LSS	10,000
WJML (FM)	1965	98.9 MHz	5:30am-12m	100,000
WMBN	1946	1340 kHz	24 hr.	(a)
WMBN (FM)	1967	96.7 MHz (S)	6am-11:15pm	1,000
Plymouth				
*WSDP (FM)	1972	89.3 MHz	n.a.	10
Pontiac				
WPON	1954	1460 kHz	24 hr.	1,000
Portage				
WBUK	1966	1560 kHz	6am-LSS	1,000
Port Huron				
WHLS	1938	1450 kHz	24 hr.	(a)
WSAO (FM)	1964	107.1 MHz (S)	24 hr.	3,000
*WORW (FM)	1973	91.9 MHz	n.a.	10
WPHM	1947	1380 kHz	5:am-12m	5,000
*WSGR (FM)	1971	91.3 MHz	n.a.	10

TABLE XVIII-6. MICHIGAN RADIO STATIONS: 1979 (cont.)

City and call letters	On air	Operating frequency	Operating schedule	Power (watts)
Rockford				
WJPW	1964	810 kHz	LSR-LSS	500
Rogers City				
WHAK	1948	960 kHz	6:15am-LSS (7:55am-LSS Sun.)	5,000
Royal Oak				
WEXL	1923	1340 kHz	6am-12m	(a)
*WOAK (FM)	1957	89.3 MHz	n.a.	10
Saginaw				
WKNX	1947	1210 kHz	LSR-LSS	10,000
WSAM	1940	1400 kHz	24 hr.	(a)
WKCQ (FM)	1947	98.1 MHz (S)	24 hr.	50,000
WIOG (FM)	1969	106.3 MHz (S)	6am-12m	3,000
WSGW	1950	790 kHz	5:30am-12m	(c)
WWWS (FM)	1968	107.1 MHz	24 hr.	2,000
St. Ignace				
WIDG	1966	940 kHz	LSR-LSS	5,000
St. Johns				
WRBJ	1959	1580 kHz	LSR-LSS	1,000
WRBJ (FM)	1972	92.1 MHz (S)	6am-12m	3,000
St. Joseph				
WSJM	1956	1400 kHz	5am-1am	(a)
WIRX (FM)	1966	107.1 MHz (S)	5am-1am	3,000
St. [illegible]uis				
[illegible]	1977	1540 kHz	n.a.	1,000
Saline				
WNRS	1958	1290 kHz	6am-LSS	500
Sandusky				
WMIC	1965	1560 kHz	6am-LSS	1,000
WMIC (FM)	1965	97.7 MHz	6am-11:15pm	3,000
Sault Ste. Marie				
WSOO	1940	1230 kHz	6am-12m	(a)
WSMM (FM)	1972	92.7 MHz	6am-1am	3,000
WSUE (FM)	1978	101.3 MHz	n.a.	90,000
Southfield				
*WSHJ (FM)	1967	88.3 MHz	n.a.	125
South Haven				
WJOR	1961	940 kHz	LSR-LSS	1,000
Spring Arbor				
*WSAE (FM)	1963	89.3 MHz	n.a.	100,000
Sturgis				
WSTR	1951	1230 kHz	19 hr.	(a)
WSTR (FM)	1953	99.3 MHz	19 hr.	1,000

TABLE XVIII-6. MICHIGAN RADIO STATIONS: 1979 (cont.)

City and call letters	On air	Operating frequency	Operating schedule	Power (watts)
Tawas City-East Tawas				
WDBI (FM)	1972	101.7 MHz	5am-12m	3,000
WIOS	1958	1480 kHz	LSR-LSS	1,000
Three Rivers				
WLKM	1962	1510 kHz	LSR-LSS	500
WLKM (FM)	1975	95.9 MHz	5:30am-11pm	3,000
Traverse City				
WCCW	1960	1310 kHz	6am-LSS	5,000
WCCW (FM)	1966	92.1 MHz	24 hr.	840
WLDR (FM)	1966	101.9 MHz (S)	5:45am-11pm	50,000
WTCM	1941	1400 kHz	6am-11pm	(a)
WTCM (FM)	1965	103.5 MHz (S)	6am-11pm	38,200
WNMC	N.O.A.	90.9 MHz	n.a.	10
Warren				
*WPHS (FM)	1964	91.5 MHz	n.a.	10
West Branch				
WBMB	1971	1060 kHz	LSR-LSS	1,000
WBMI	N.O.A.	105.5 MHz	n.a.	3,000
Whitehall				
WLRC	1968	1490 kHz	5:30am-12m	(a)
WLRQ (FM)	1975	95.3 MHz	5:30am-12m	3,000
Wyoming				
WYGR	1964	1530 kHz	LSR-LSS	500
Ypsilanti				
*WEMU (FM)	1965	88.1 MHz	n.a.	10
WSDS	1962	1480 kHz	6am-LSS	500
WYFC	1962	1520 kHz	LSR-LSS	250
Zeeland				
WZND (FM)	1971	99.3 MHz	5am-12:30am	3,000

SOURCES: Broadcasting Publications, Inc., Broadcasting Yearbook, 1979 (Washington, D.C.: 1979), pp. B-102 to B-109; and Standard Rate and Data Service, Inc., Spot Radio Rates and Data and Spot Radio, Small Markets (Skokie, Ill.: monthly) (operating schedule data).

NOTE: The operating schedule data pertain to 1975.

a. 1,000 watt days, and 250 watt nights.
b. 1,000 watt days, and 500 watt nights.
c. 5,000 watt days, and 1,000 watt nights.
d. 50,000 watt days, and 10,000 watt nights.
e. 50,000 watt days, and 5,000 watt nights.
f. 165,000 watt days, and 43,000 watt nights.
g. 10,000 watt days.
h. 10,000 watt days, and 1,000 watt nights.
i. Satellite to WVOM (FM), Ann Arbor.
j. 500 watt days, and 250 watt nights.
k. 500,000 watt days.
l. 250 watt days.

kHz: kilohurtz.
LSR-LSS: Local sunrise to local sunset.
MHz: megahurtz
N.O.A.: not on air yet.
QS: quadraphonic stereo.
S: stereo.
12m: midnight.tt nights
*: noncommercial stations.

TABLE XVIII-8. SELECTED DATA OF CLASS A TELEPHONE CARRIERS IN MICHIGAN: YEARS ENDED 31 DECEMBER 1961-1979

Year	Miles of wire in cable (1,000)	Miles of aerial wire (1,000)	Miles of radio relay system	Central offices	Number of calls originating from company and service telephones[a] (millions)	
					Local	Toll
1961	15,315	379	1,869	651	5,378	164
1962	15,830	367	1,657	661	5,412	171
1963	16,534	360	1,749	667	5,704	186
1964	17,686	337	1,803	705	6,009	306
1965	19,062	318	2,048	712	6,430	235
1966	20,841	308	2,206	725	6,755	264
1967	23,032	288	2,191	805	7,220	295
1968	25,217	264	2,280	817	7,441	333
1969	27,503	226	2,432	833	7,956	351
1970	29,510	184	2,421	837	8,324	383
1971	31,279	157	2,588	848	8,887	407
1972	33,273	128	2,335	862	9,278	566
1973	35,825	108	2,801	883	9,672	676
1974	38,416	97	2,853	903	10,113	699
1975	40,691	76	3,473	926	10,116	976
1976	42,532	61	2,939	934	10,615	1,055
1977	44,328	52	2,362	941	11,105	1,186
1978	46,438	39	2,324	954	11,752	1,238
1979	48,869	33	2,357	959	12,080	1,286

SOURCE: Federal Communications Commission, Statistics of Communications Common Carrier, 1961 through 1979 (Washington, D.C.: annually), Table 8 (1979).

a. Partly estimated.

TABLE XVIII-9. NUMBER OF TELEPHONE MAIN STATIONS IN MICHIGAN AT YEAR END: 1976-1980

Company	Main office	1976	1977	1978	1979	1980
Alba	Alba	396	416	444	497	550
Allendale	Allendale	2,567	2,582	2,798	2,960	2,991
Au Gres	Au Gres	1,867	2,005	1,920	2,075	2,159
Augusta[a]	Augusta	--	1,232	1,270	1,370	1,360
Banfield	Banfield	930	970	1,008	1,002	1,028
Baraga	Baraga	1,460	1,489	1,595	1,542	1,582
Barry County	Delton	3,358	3,417	3,461	3,668	3,733
Blanchard Tel. Assn., Inc.	Blanchard	784	798	843	865	875
Bloomingdale	Bloomingdale	1,040	1,071	1,129	1,181	1,207
Camden	Camden	3,887	4,022	4,105	4,150	4,179
Carr	Branch	680	725	758	821	841
Central[b]	Chesaning	7,066	13,913	14,771	15,178	15,482
Chatham	Chatham	1,710	1,838	1,937	2,003	2,033
Chippewa County	Brimley	622	691	648	619	743
Clayton	Clayton	526	530	541	554	563
Climax	Climax	712	725	754	799	814
Concord	Concord	1,274	1,303	1,345	1,352	1,349
Continental	Pinconning	28,440	30,547	32,347	33,704	34,772
Deerfield Farmers	Deerfield	1,936	1,944	2,035	2,112	2,122
Drenthe	Drenthe	452	455	474	466	487
Drummond Island	Drummond	806	870	956	1,062	1,163
Farmers Mutual	Chapin	444	455	480	486	497
General	Main	387,887	403,385	417,929	431,712	439,990
	PBX	47,592	49,189	52,615	53,532	56,589
Hadley	Hadley	787	837	905	969	983
Hickory	Hickory Corners	879	952	990	1,023	1,054
Island	Bois Blanc	251	295	313	333	364
Kaleva	Kaleva	1,201	1,266	1,363	1,418	1,428
Kingsley	Kingsley	1,339	1,434	1,541	1,584	1,644
Lennon	Lennon	1,278	1,316	1,366	1,422	1,475
Mesick	Mesick	1,462	1,553	1,579	1,586	1,582
Michigan Bell	Main	2,919,866	2,992,973	3,038,858	3,137,272	3,135,488
	PBX	670,573	696,225	712,685	729,627	738,547
Mid-Michigan Tel. Corporation	Stockbridge	26,880	27,983	28,886	30,958	31,167
Midway	Watton	681	683	656	685	685
Midwest[b]	Chesaning	3,357	--	--	--	--

TABLE XVIII-9. NUMBER OF TELEPHONE MAIN STATIONS IN MICHIGAN AT YEAR END: 1976-1980 (cont.)

Company	Main office	1976	1977	1978	1979	1980
Munising	Munising	2,973	3,033	3,051	3,074	3,115
New Morenci Home	Morenci	1,594	1,439	1,623	1,639	1,596
Northern	Chesaning	618	785	791	779	761
Ogden Mutual	Blissfield	384	396	402	393	386
Ontonagon County	Ontonagon	3,350	3,412	3,345	3,437	3,537
Parma[c]	Parma	1,533	1,568	1,532	--	--
Peninsula	Old Mission	657	676	717	742	741
Pigeon	Pigeon	1,147	1,160	1,166	1,184	1,197
Public Service[b]	Chesaning	2,656	--	--	--	--
Sand Creek	Adrian	951	975	978	977	982
Shiawassee	Perry	3,129	3,266	3,439	3,602	3,692
Southern	Brooklyn	7,875	8,338	8,735	9,154	9,243
Springport	Springport	1,297	1,308	1,318	1,346	1,337
Twining	Twining	365	399	400	411	404
United[a]	Augusta	1,208	--	--	--	--
Upper Peninsula	Carney	1,955	2,045	2,119	2,199	2,267
Waldron	Waldron	393	407	419	436	550
Westphalia	Westphalia	693	681	692	705	710
Winn	Winn	415	437	450	459	459
Wolverine	Millington	5,420	5,688	5,984	6,188	6,294
Amberg[d]		1,150	1,266	1,054	n.a.	--
Niagara[d]		2,408	2,489	2,573	n.a.	--

SOURCE: Michigan Public Service Commission, special release; and Michigan Independent Telephone Association, special release.

NOTE: General Telephone Company of Indiana, General Telephone Company of Ohio, and General Telephone Company of Wisconsin also have exchanges in Michigan.

a. United changed name to Augusta.

b. Midwest and Public Service merged into Central.

c. The Parma Telephone Company merged with the Mid-Michigan Telephone Corporation and is operated as a separate exchange of that company.

d. Headquartered in Wisconsin. Amberg had telephones in Goodman and Pembrine; Niagara in Aurora, Florence, Niagara, and Spread Eagle.

n.a.: not available.

XIX. ENERGY PRODUCTION AND CONSUMPTION

At the end of 1980 there were 167 electric generating plants in Michigan not including the two nuclear plants near Bridgeman owned by the Indiana and Michigan Electric Company. The latter is considered to be part of the Indiana system. Michigan utilities operate 3 nuclear plants, 37 steam plants, 64 hydroelectric plants, 19 gas trubine plants, and 46 internal combustion engine plants. There are 16 steam plants and one gas turbine and one internal combustion engine plant operated by private industry. Electric utilities had 22,692 megawatts of capacity and private industry 883.7 megawatts. Private industry electricity generation data pertain to the year, 1979. The federal government no longer collects these figures.

About 90 percent of the state's population is served by The Detroit Edison Company and Consumers Power Company, coordinating their activities under the Michigan Electric Coordinated Systems. The Michigan Electric Coordination Municipal Cooperative Pool includes Consolidated Aluminum Company, Grand Haven Municipal, Howell Municipal, Northern Michigan Electric Cooperative, Traverse City Municipal, Wolverine Electric Cooperative, and Zeeland Municipal. Michigan also is served by several other municipal utilities, rural electric cooperatives, Wisconsin Electric Power Company, Wisconsin Public Service Corporation, and other privately owned utilities.

At the end of 1980, Michigan had 3.7 percent of the nation's utility industry generating capacity although we generated only 3.3 percent of the nation's electricity. The ratio of production to capacity there was 3.3 compared with 3.7 in the nation, indicating a greater reserve on the average to meet sudden bursts of demand for energy to produce steel, motor vehicles, and other specialties of the Wolverine State.

Two decades ago, less than 4 percent of the naton's electric utility sales to manufacturers took place in Michigan. In 1973, the peak year for automotive production here, the Michigan share was 4.8 percent. A major reason for the trend is that private industry is closing down capacity and relying more heavily on the utilities. In 1960 nearly 15 percent of Michigan's generating capacity belonged to industry. The 1979 figure was less than 4 percent.

Michigan has experienced a declining share of the U.S. population as well as commerical enterprise in the broad areas of trade and services. Consequently, our share of residential and commerical sales by electric utilities has declined.

This state's largest gas distribution company, Michigan Consolidated Gas Company, is owned by American Natural Resources, a holding company which also owns Michigan Wisconsin Pipe Line Company, a supplier to Michigan Consolidated. Consumers Power also distributes natural gas. Its largest supplier is Panhandle Eastern Pipe Line Company. During 1973, when Panhandle was unable to satisfy its commitments to deliver gas, Consumers Power Company was forced to curtail delivery to its interruptible customers, even though its new synthetic gas plant at Marysville had just come on line. That facility, now mothballed, supplied about 10 percent of the gas sold by Consumers Power by Converting natural gas liquids to methane through the application of steam. Panhandle Eastern has since arranged for the purchase of Algerian gas delivered to the U.S. in specially built ships. SNG is regassified in Louisiana for pipeline delivery to Panhandle customers. Consumers, like Michigan Consolidated, now can guarantee supplies to existing customers as well as to new ones that wish to be connected, so much so that during 1977 it was able to divert some of its Marysville production to Columbia Gas System to prevent further hardship in Ohio when plants there were being shut due to lack of natural gas.

Because of its availability and because the state has more cold weather than most sections, Michigan is a relatively heavy consumer of natural gas for space heating. This phenomenon is evident in consumption figures for the commercial and residential sections where Michigan's share of national consumtpion is well above our share of population. Figures for 1970 revealed that 70 percent of Michigan homes were gas - heated compared with 55 percent for the nation as a whole. Data from the 1980 censuses of population and housing still are being tabulated.

Michigan's share of natural gas consumed by manufacturers also has increased since the early 1960s; however that share still is unusually low compared with our share of manufacturing activity. No doubt this figure reflects an unusually large concentration of petrochemicals in Texas, Oklahoma, and Louisiana, close to natural gas wells. Natural gas is a raw material in the manufacture of fertilizer and other compounds. Also, tire companies and other heavy users of natural gas for process heat tend to be concentrated in states other than Michigan.

Interstate natural gas pipeline companies are regulated by the Federal Power Commission. These companies deliver to distribution utilities, such as Michigan Consolidated and Consumers Power, natural gas that they purchase from producers at prices set by the FPC. The distribution utilities are regulated by the states in which they sell gas to homeowners and other customers. In Michigan, The Public Service Commission sets retail gas prices according to standards of fair rate of return on investment for the utilities. The PSC also sets rates at which electricity may be sold by publicly owned electric distribution utilities, according to fair rate of return. The price of electricity depends, for the most part, on the cost of producing and distributing it just as the price of natural gas depends on the cost of purchasing and distributing it.

In general, the price of electricity in Michigan has been increasing at a rate above the national average, whereas the price of natural gas here has been increasing at a rate below the national average. Residential gas consumers benefit from lower prices in Michigan than in the nation as a whole. Industrial and commercial gas consumers currently pay prices at about the national average. In previous years, these consumers have paid prices well above the national average. In general, Michigan utilities offer gas prices that are competitive with most other areas but we are among the states where electric rates are high.

There are variations within the state. Consumers Power gas and electric rates are above those charged respectively by Michigan Consolidated and Detroit Edison. Electric rates are affected by higher distribution costs to the less densely populated areas of the state. Gas rates are affected by higher distribution costs as well as the costs passed on by Panhandle Eastern. These disparities within Michigan will widen when the new nuclear power plant that Consumers is building near Midland gets into the rate base and when the very high prices that Panhandle now pays for Algerian gas are passed onto the consumer. From the point of view of the residential consumer, these prices represent a major burden on the family budget. From the perspective of business and industry, energy is a relatively small component in the total cost of doing business. Availability is the crucial factor.

Nowhere is the importance of availability apparent than in Michigan's Upper Peninsula. To fully develop its potential for exploiting forest and mineral resources it must increase its supply of electricity. To our south, the situation is critical in some parts of Ohio where natural gas is scarce.

The level of proved natural gas reserves in this country peaked in 1967 and has since dropped by a third. Consumption peaked in 1972 and has since declined by 12 percent (1978 figure), Crude oil reserves trended downward after 1966, were hiked in 1970 when the Alaskan finds were included in the statistics, and have trended downward since then, by about a third. Petroleum consumption peaked in 1978 and has drifted downward since then.

The supply - demand disparity has its roots in the 1960s, with petroleum and natural gas prices below levels necessary to stimulate enough exploration to maintain a situation of cheap energy. Between 1964 and 1969, the average wellhead price of a barrel of oil produced in this country increased by 15 percent, from $2.92 to $3.35. Wholesale gasoline prices rose 14 percent for regular and 11 percent for premium during those five years and distillate fuel oil went up 20 percent in price. (Number 2 fuel oil is one of the middle distillates from refineries used as fuel in home heating, diesel engines in motor vehicles, and jet fuel in commercial aviation, and in other applications, such as igniting boilers that burn residual fuel oil.) The price of residual fuel oil inched ahead a mere 2 percent. (Residual is a gooey, black substance mostly consumed by electric utilities and industry. It is difficult to use).

Imported crude oil was even cheaper than the domestic varities. During the 1950s, several of the large oil companies had built refineries on the East Coast designed especially for processing high sulphur, or sour, crude from the Arab countries. Concerned with national defense, the President placed limits on the amounts of crude oil, unfinished oils, and finished petroleum products that could be brought into the country on the theory that a sheltered domestic industry would flourish. Initially, Canadian crude was exempted from the quota system, but with the understanding that Ottawa would not allow excessive amounts to flow to the United States.

The price of natural gas at the wellhead increased at a somewhat faster pace than that of crude oil and petroleum products from an average of 16 cents per Mcf. to 21 cents per Mcf., or 31 percent, on sales regulated by the Federal Power Commission.

Depletion allowances were designed to stimulate domestic production by giving well owners, in calculating federal income taxes, the right to deduct 22 percent of their receipts from crude oil production as a cost on the first 50 percent of taxable income. In effect, these allowances were subsidies for production. Petroleum exploration, production, and processing are capital intensive, requiring enormous investments in wells, pipelines, and refineries, a fact which also stimulates production from existing wells. These were reasons why large oil companies had marketing departments to move as much oil as possible in order to take advantage of depletion allowances and recover capital investment quickly as possible. The major strategy during the 1960s was to situate gasoline service stations on expensive real estate for maximum exposure of the brand name, and to promote gasoline sales through trading stamps and contests. Meanwhile, the costs of finding new gas and oil reserves shot from $50,589 (1964) to $86,499 (1969), or 71 percent for an oil well; and from $104,752 to $154,318, or 47 percent, for a gas well. Changes of striking gas without oil increase with depth.

The results of the disparate price and cost trends are apparent in U.S. drilling activity. During 1964 over 43,000 wells were drilled; during 1969 the figure was 32,000. By 1971 the number of attempts to reach gas or oil had declined to 26,000. Changes in the laws and the move to deregulation since the early 1970s have reversed the decline in exploration; in 1979, 49,000 wells were completed. Known reserves have continued to decline, however, because annual consumption still exceeds new additions to known reserves.

Michigan is in the midst of an oil and gas boom: Marketed production of natural gas from Michigan wells has quadrupled since 1970. As a producer, however, Michigan remains in the little league and in 1978 still imported over 80 percent of the natural gas consumed here. Natural gas is found alone and in association with petroleum. In oil wells, it provides the pressure that pushes oil to the surface. Both nonassociated and associated natural gas usually arrives with water and other impurities such as sulphur propane, and butane. Impurities have to be stripped out in gas plants before the gas can be piped to customers. In Michigan, there are 11 gas plants, producing about 2 percent of the nation's natural gas.

One of Michigan's major assets is its vast storage areas for natural gas. These are gas and oil fields that have been depleted but still have value as inexpensive reservoirs in which to pump gas during summer months when the nation's production of associated gas exceeds consumption. Both Consumers and Mich Con draw down these reserves during winter.

Even though oil production has dramatically increased in the Wolverine State since the early 1970s we still account for little more than 1 percent of the national total. Michigan refineries account for less than 1 percent of the crude oil processing in this country. Approximately 3.5 percent of national petroleum products consumption takes place in this state.

Michigan has coal reserves but they are not economical. We also import all of the nuclear fuel consumed in Michigan generating plants.

Michigan's energy future was cloudy even before the nuclear accident at Three Mile Island in Pennsylvania. Consumers Power Palisades plant near Benton Harbor has been trouble plagued since its inception. Its Midland plant on the Tittabawassee River is scheduled to start up in September 1984; construction problems and regulatory delays have plagued that project. Detroit Edison's Fermi 2 plant is scheduled to begin production in March. Beyond 1983, Detroit Edison is projecting completion of two coal plants, in 1984 and 1985. The Lansing Board of Water and Light plans to bring another coal plant on line in 1986.

The Energy Administration, Michigan Department of Commerce, has developed data on energy usage and prospects for the state, in total and by type. The U.S. Department of Energy is another source of broad energy statistics. Figures on hydrocarbon production, consumption, and reserves are compiled by the U.S. Bureau of Mines in cooperation with the Geological Survey Division, Michgan Department of Natural Resources. Consumption of motor fuels is estimated by the U.S. Highway Administration on the basis of motor fuel tax receipts. The Michigan Public Service Commission publishes financial statistics on the operations of natural gas distribution and electric utilities. The Federal Power Commission is a leading source of data on the physical aspects of electricity production. The Edison Electric Institution publishes various statistics in its Statistical Yearbook of the Electric Utility Industry. The American Gas Association publishes data on gas utilities in its annual Gas Facts.

Consumption of fuels for heat and power is a regular feature of the Census of Manufacturers, conducted twice each decade. The Housing Census yields information about the kinds of fuel used for space and water heating and cooking.

Related data on oil and gas wells and natural gas processing appear in chapter XIII. A list of oil refineries in the state is presented in chapter XV.

Data on plant and customers of each electric and gas distribution utility are available from the records of the Michigan Public Service Commission in the Michigan Department of Commerce. The PSC is responsible for regulating public utilities.

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TABLE XVIII-7. BUSINESS AND RESIDENCE TELEPHONES IN MICHIGAN AND THE UNITED STATES: YEARS ENDED 31 DECEMBER 1961-1979

	Michigan				United States			
Year	Business	Residential	Total	Percentage of households with service[a]	Business	Residential	Total	Percentage of households with service[a]
1961	853,300	2,530,500	3,383,800	n.a.	21,693,500	55,731,900	77,425,400	79
1962	884,800	2,620,700	3,505,500	87	22,702,500	58,269,200	80,971,700	80
1963	914,200	2,726,300	3,640,500	88	23,609,400	60,840,900	84,450,300	81
1964	972,700	2,862,000	3,834,700	91	24,716,600	64,070,800	88,787,400	83
1965	1,020,400	3,044,600	4,065,000	93	26,008,300	67,650,500	93,658,800	85
1966	1,083,900	3,217,100	4,301,000	94	27,413,500	71,372,100	98,785,600	98
1967	1,139,900	3,368,000	4,507,900	94	28,929,300	74,822,600	103,751,900	88
1968	1,198,600	3,512,800	4,711,400	93	30,356,100	78,899,500	109,255,600	89
1969	1,265,800	3,691,500	4,957,300	95	32,220,600	82,980,100	115,200,700	90
1970	1,307,900	3,826,800	5,134,700	95	33,304,800	86,850,000	120,221,000	92
1971	1,332,400	4,012,200	5,344,600	97	34,444,900	90,695,900	125,140,800	93
1972	1,393,000	4,193,000	5,586,000	95	35,989,500	95,613,000	131,602,500	92
1973	1,440,927	4,419,084	5,860,011	98	37,434,884	100,853,505	138,228,389	94
1974	1,487,568	4,577,214	6,064,782	98	38,748,513	105,222,939	143,971,452	94
1975	1,490,220	4,761,455	6,251,675	98	39,497,650	109,510,153	149,007,803	94
1976	1,548,286	4,977,160	6,525,446	99	40,682,411	114,490,857	155,173,288	95
1977	1,611,508	5,157,834	6,769,342	100	42,319,549	119,752,597	162,072,146	96
1978	1,654,291	5,326,848	6,981,139	100	44,284,209	124,742,739	169,026,948	97
1979	1,730,220	5,514,554	7,244,774	101	45,951,980	129,583,132	175,535,112	98

SOURCE: Federal Communications Commission, Statistics of Communications Common Carriers, 1961 through 1979 (Washington, D.C.: annually), Table 6 (1979).

a. Households with service are the sum of residence main, apartment house PBX and residence service main telephones, and other residence PBX systems. There tends to be a slight overstatement of the proportion of households with telephone service.

n.a.: not available.

TABLE XIX-1. PER CAPITA AND TOTAL ENERGY CONSUMPTION IN MICHIGAN AND THE UNITED STATES: 1960-1979

Year	Per capita (Million BTU)		Total (Trillion BTU)		Michigan as a percentage of United States	
	Michigan	United States	Michigan	United States	Per capita	Total
1960	235	245	18,403	440,797	96	4.2
1961	237	244	18,725	447,228	97	4.2
1962	250	252	19,838	467,977	99	4.2
1963	259	258	20,895	486.053	100	4.3
1964	262	266	21,475	507,756	99	4.2
1965	274	274	22,907	529,891	100	4.3
1966	288	286	24,478	559,921	101	4.4
1967	291	293	25,102	578,918	99	4.3
1968	304	308	26,465	613,233	99	4.3
1969	314	321	27,598	645,289	98	4.3
1970	308	328	27,382	668,281	94	4.1
1971	317	331	28,463	282,997	96	4.2
1972	332	344	29,940	716,278	97	4.2
1973	339	355	30,756	746,025	95	4.1
1974	321	344	29,213	727,552	93	4.0
1975	314	332	28,580	707,094	95	4.0
1976	327	347	29,769	745,093	94	4.0
1977	314	353	28,686	763,354	89	3.8
1978	318	358	29,160	781,612	89	3.7
1979	315	359	28,956	789,612	88	3.7

SOURCE. Developed form the Energy Information Administration, U.S. Department of Energy, *Federal Energy Data System (FEDS) Statistical Summary Update* (Washington, D.C.: U.S. Government Printing Office, 1980), Table 1; and Table I-2.

TABLE XIX-2. PERCENTAGE CHANGE IN ENERGY CONSUMPTION IN MICHIGAN AND THE UNITED STATES, BY FUEL TYPE AND CONSUMER TYPE: 1960-1965, 1965-1979, AND 1960-1979

	Percentage change					
	Michigan			United States		
Item	1960-65	1965-79	1960-79	1960-65	1965-79	1960-79
Gross energy consumption:						
By fuel type						
Petroleum						
Asphalt	(.27)	.89	.39	.22	.35	.64
Aviation gasoline	.31	(.78)	(.72)	(.26)	(.68)	(.76)
Distilate fuel	.06	.03	.09	.13	.56	.76
Jet fuel	.31	.66	1.17	.64	.81	1.98
Kerosene	.44	(.74)	(.62)	(.02)	(.30)	(.31)
LPG	.33	1.20	1.93	.35	.74	1.35
Lubricants	.21	.22	.48	.10	.39	.54
Motor gasoline	.19	.40	.67	.15	.53	.77
Residual fuel	(.28)	1.30	.65	.05	.49	.56
Road oil	.63	(.92)	(.88)	.12	(.74)	(.71)
All other petroleum	.33	.10	.47	.41	1.05	1.95
Total petroleum	.12	.32	.48	.17	.60	.86
Total coal	.27	(.11)	.13	.17	.27	.49
Natural gas	.50	.56	1.33	.27	.31	.67
Nuclear power	-	76.62	-	6.20	62.61	456.97
Hydro-electric power	(.59)	(.06)	(.61)	.24	.54	.91
Geothermal power	0	0	0	4.25	19.00	104.00
Wood and waste	-	-	-	.87	.86	2.47
TOTAL ENERGY CONSUMED	.24	.26	.57	.20	.49	.79

TABLE XIX-2. PERCENTAGE CHANGE IN ENERGY CONSUMPTION IN MICHIGAN AND THE UNITED STATES, BY FUEL TYPE AND CONSUMER TYPE: 1960-1965, 1965-1979, AND 1960-1979 (cont.)

	Percentage change					
	Michigan			United States		
Item	1960-65	1965-79	1960-79	1960-65	1965-79	1960-79
By end use sector w/out and with electricity distributed						
Residential without	.20	.03	.24	.14	.03	.17
with	.22	.24	.51	.22	.45	.76
Commercial without	.13	.40	.58	.15	.15	.32
with	.22	.57	.92	.23	.59	.96
Industrial without	.24	(.15)	.06	.18	.22	.44
with	.30	.08	.40	.20	.39	.67
Transportation without	.20	.50	.80	.17	.66	.95
with	.20	.50	.80	.17	.66	.94
Energy input at electric utilities	.42	1.05	1.90	.34	1.19	1.94
Electricity exchanged across state borders	.27	(.78)	(.73)	-	-	-
Electricity sales	.44	.86	1.68	.38	1.17	2.01
Associated losses	.38	.88	1.60	.33	1.19	1.92
TOTAL ENERGY CONSUMED	.24	.26	.57	.20	.49	.79

SOURCE: Developed from Energy Information Administration, U.S. Department of Energy, Federal Energy Data System (FEDS) Statistical Summary Update (Washington, D.C.: U.S. Government Printing Office, 1980, Tables 1, 3, 4, 5, and 6.

NOTE: Figures in parentheses are negative.

TABLE XIX-3. PER CAPITA ENERGY CONSUMPTION IN MICHIGAN AND UNITED STATES: 1960, 1965, AND 1979 (cont.)

	Consumption Per capita					
	Michigan			United States		
Item	1960	1965	1979	1960	1965	1978
By end use sector w/out and with electricity distributed						
Residential without	48	54	50	35	37	34
with	61	69	78	49	55	71
Commercial without	19	20	26	23	24	25
with	29	33	47	33	38	54
Industrial without	77	90	70	83	91	99
with	96	117	115	105	117	144
Transportation without	49	55	75	58	64	93
with	49	55	75	58	64	94
Energy input at electric utilities	38	50	94	46	57	111
Electricity exchanged across state borders	4	5	1	--	--	--
Electricity sales	12	16	27	13	17	32
Associated losses	30	39	67	33	40	78
TOTAL ENERGY CONSUMED	235	274	315	245	274	362

SOURCE: Developed form Energy INformation Administration, U.S. Department of Energy, Federal Energy Data System (FEDS) Statistical Summary Update (Washington, D.C.: U.S. Government Psrinting Office, 1980 Tables 1, 3, 4, 5, and 6.

TABLE XIX-4. MICHIGAN PATTERNS OF ENERGY CONSUMPTION: 1979

	End-user				
Fuel Type	Residential	Commercial	Industrial	Transportation	Electric Utilities (energy input)
Coal (short tons)	1.6 (64,000)	2.4 (97,000)	208.3 (8,311,000)	0	546.4 (23,134,000)
Natural Gas (MMcf)	376.0 (369,000)	185.6 (182,000)	278.7 (274,000)	12.6 (12,000)	39.1 (38,000)
Asphalt	0	25.9 (3,903)	0	0	0
Aviation Gasoline	0	0	0	2.0 (395)	0
Distillate	66.1 (11,341)	12.2 (2,096)	32.5 (5,585)	65.5 (11,243)	8.0 (1,377)
Jet Fuel	0	0	0	39.8 (7,144)	.1 (15)
Kerosene	2.9 (519)	0	5.8 (1,016)	0	0
LPG	16.2 (4,415)	2.9 (779)	16.3 (4,431)	.3 (86)	0
Lubricants	0	0	12.2 (2,017)	10.1 (1,659)	0
Motor Gasoline	0	3.9 (738)	4.4 (846)	560.4 (106,677)	0
Residual	0	3.1 (487)	20.8 (3,306)	1.3 (208)	93.0 (14,798)
Road Oil	0	.1 (10)	0	0	0
Other Petroleum Products	0	0	60.8 (10,332)	0	0
Total Petroleum	85.3 (16,275)	48.0 (8,013)	152.9 (27,533)	679.4 (127,412)	101.1 (16,190)
Nuclear Power	0	0	0	0	163.0 (15,139)
Hydro Electric Power (million KWH)	0	0	1.3 (121)	0	12.4 (1,192)
Electricity Sales	75.2 (22,042)	56.7 (16,604)	120.1 (35,203)	.2 (68)	862.2 (total input)
Electrical Energy Losses	182.3 (53,434)	137.3 (40,252)	291.2 (85,338)	.6 (164)	862.2 (total input)
Total Energy Consumed	720.4	430.0	1,052.4	692.8	2,895.6

SOURCE: U.S. Department of Energy/Energy Information Administration, State Energy Data Report, September 1981.

NOTE: Petroleum products in thousands of barrels, natrual gas in trillions of cubic feet, coal in thousands of tons, hydro and nuclear, and other in trillions of British thermal units, and electricity in billions of kilowatt hours. The figures in parentheses are in trillions of British thermal units. Totals in the last line are trillions of British thermal units.

TABLE XIX-5. CONSUMPTION OF NATURAL GAS IN MICHIGAN, BY TYPE OF CONSUMER: 1947-1979

(Millions of cubic feet)

Year	Residential	Commercial	Industrial	Electric utilities[a]	Other[a]	Total
1947	44,065	7,406	29,100	--	--	80,571
1948	43,807	6,882	25,289	--	--	75,978
1949	47,582	7,320	29,413	--	--	84,315
1950	75,711	10,746	40,723	--	--	127,180
1951	99,307	13,272	41,704	--	--	154,283
1952	103,039	13,870	47,082	--	--	163,991
1953	103,883	14,008	60,416	--	--	178,307
1954	118,479	15,339	55,104	--	--	188,922
1955	128,169	16,522	62,314	--	--	207,005
1956	155,140	20,313	68,012	--	--	243,465
1957	169,997	26,619	75,737	--	--	272,353
1958	173,207	32,019	92,878	--	--	298,104
1959	192,963	38,456	101,337	--	--	332,756
1960	201,977	43,001	123,553	--	--	368,531
1961	218,084	42,838	146,810	--	--	407,732
1962	234,483	64,495	144,699	--	--	443,677
1963	242,886	68,676	152,015	--	--	463,667
1964	250,971	74,367	175,290	--	--	500,628
1965	270,996	84,834	202,410	--	--	558,240
1966	286,839	95,282	237,742	--	--	619,863
1967	302,472	107,796	279,178	--	--	689,446
1968	315,694	115,075	250,906	6,582	2,049	690,306
1969	333,264	127,848	286,856	15,566	2,214	765,748
1970	340,033	130,589	290,413	32,163	2,119	795,317
1971	343,773	141,821	273,184	69,777	4,396	832,951
1972	355,266	152,874	272,319	58,953	7,096	846,508
1973	341,607	172,202	337,484	46,412	8,072	905,777
1974	346,116	181,738	300,680	46,623	8,348	883,505
1975	334,866	177,218	301,573	47,151	4,731	865,539
1976	339,417	175,097	297,446	53,509	3,123	868,592
1977	299,199	129,286	259,044	32,152	1,980	721,661
1978	328,260	141,748	267,414	36,334	1,187	774,943
1979	369,378	182,033	259,058	37,860	283	848,612

SOURCE: Bureau of Mines, *Minerals Yearbook--Metals, Minerals, and Fuels*, 1947 through 1975 (Washington, D.C.: annually), Natural Gas Section, Table 9 (1975); and Bureau of Mines, special release (1976, 1977, and 1978 data); and U.S. Department of Energy, *Natural Gas Production and Consumption 1979* (Washington, D.C.: annually) January 1981.

[a] Included in "Industrial" prior to 1968.

TABLE XIX-6. ESTIMATED PROVED RECOVERABLE RESERVES OF NATURAL GAS IN MICHIGAN AND THE UNITED STATES: 31 DECEMBER 1947-1979

	Michigan natural gas				United States Total
Year	Non-associated[a]	Associated-dissolved[b]	Underground storage[c]	Total	
1947	124,339	44,130	5,148	173,617	166,081,307
1948	121,502	45,876	15,609	182,987	173,869,340
1949	134,642	47,495	21,774	214,911	180,381,344
1950	--	--	--	195,074	185,592,699
1951	119,001	41,366	42,648	203,025	193,811,500
1952	132,752	38,645	83,146	254,543	199,716,225
1953	34,629	46,780	194,110	275,519	211,447,132
1954	31,194	85,703	213,203	330,100	211,710,732
1955	46,764	73,013	206,097	325,874	223,697,445
1956	45,596	82,098	234,092	361,786	237,774,569
1957	84,941	80,980	278,107	444,028	246,569,255
1958	121,669	104,627	271,817	498,113	254,142,037
1959	116,255	113,889	285,259	515,403	262,596,593
1960	116,015	128,427	341,316	585,758	263,758,800
1961	138,966	158,562	369,136	666,664	267,727,671
1962	128,620	144,733	377,207	650,560	273,765,604
1963	112,403	138,924	471,485	722,812	276,151,233
1964	151,853	127,372	495,051	774,276	281,251,454
1965	108,141	127,174	510,489	745,804	286,468,923
1966	73,556	118,999	580,576	773,131	289,332,805
1967	90,774	87,711	582,427	760,912	292,907,703
1968	77,274	79,909	600,243	757,426	287,349,856
1969	73,268	82,186	595,510	750,964	275,108,835
1970	211,134	112,530	616,007	939,671	290,746,408
1971	179,479	184,541	652,462	1,016,482	278,805,618
1972	293,938	385,580	617,297	1,296,815	266,084,846
1973	492,825	431,086	624,597	1,548,508	249,950,207
1974	477,613	455,230	525,411	1,458,254	237,132,497
1975	483,268	536,766	586,715	1,606,749	228,200,176
1976	528,778	524,475	544,893	1,598,146	216,026,074
1977	614,184	587,542	589,474	1,791,200	208,877,878
1978	607,556	562,190	598,835	1,768,581	200,301,707
1979	605,819	531,784	660,320	1,797,923	194,916,624

SOURCE: Bureau of Mines, Minerals Yearbook--Metals, Minerals, and Fuels, 1947 through 1975 (Washington, D.C.: annually), Natural Gas Section, Table 16 (1975); and American Petroleum Institute, special release.

a. Free gas not in contact with crude oil in the reservoir.
b. Associated gas is free gas in contact with crude oil in the reservoir; dissolved gas is gas in solution with crude oil in the reservoir.
c. Gas held in underground reservoirs for storage purposes only.

TABLE XIX-3. PER CAPITA ENERGY CONSUMPTION IN MICHIGAN AND UNITED STATES: 1960, 1965, AND 1979

Item	Consumption Per capita					
	Michigan			United States		
	1960	1965	1979	1960	1965	1978
Gross energy consumption:						
By fuel type						
Petroleum						
Asphalt	2	2	3	4	4	5
Aviation gasoline	1	1	0	2	1	0.3
Distilate fuel	22	21	20	22	23	32
Jet fuel	2	3	4	4	6	10
Kerosene	3	4	1	3	3	2
LPG	2	2	4	5	6	10
Lubricants	2	2	2	1	2	2
Motor gasoline	44	49	62	42	46	62
Residual fuel	9	6	13	20	19	25
Road Oil	0	0	0	0.2	0.2	0.1
All other petroleum	5	7	7	7	10	17
Total petroleum	92	97	116	111	120	170
Total coal	87	102	83	56	61	69
Natural gas	49	69	97	69	82	95
Nuclear power	0	0	18	0	0.2	13
Hydro-electric power	5	2	1	9	11	15
Geothermal power	0	0	0	0	0	0.4
TOTAL ENERGY CONSUMED	235	274	315	245	274	362

TABLE XIX-7. PRODUCTION AND DISPOSITION OF NATURAL GAS IN MICHIGAN AND INTERSTATE NATURAL GAS MOVEMENTS TO AND FROM MICHIGAN: 1960-1979

(Millions of cubic feet)

	Production		Disposition			Average wellhead value (cents per mcf)	Interstate movements	
Year	From gas wells	From oil wells	Used for repressuring	Vented and flared	Marketed production		Deliveries to Canada	Receipts from other states
1960	18,900	8,000	2,087	4,023	20,790	21.4	0	371,540
1961	20,000	12,200	4,023	480	27,697	21.1	0	408,972
1962	18,800	10,500	146	167	28,987	21.3	0	429,472
1963	25,200	10,400	1,640	1,110	32,850	27.1	0	471,030
1964	21,100	12,600	1,608	704	31,388	25.4	0	493,665
1965	24,700	12,200	1,900	442	34,558	25.1	0	547,370
1966	26,868	16,121	8,353	516	34,120	25.2	20,174	653,316
1967	22,709	20,383	7,642	1,861	33,589	24.7	40,418	698,475
1968	24,151	19,779	2,330	1,120	40,480	25.1	68,045	742,934
1969	22,285	16,405	1,719	808	36,163	25.7	29,770	776,010
1970	23,774	16,264	378	809	38,851	26.7	10,643	791,773
1971	10,968	15,482	788	0	25,662	26.4	14,236	839,385
1972	13,523	21,730	0	1,032	34,221	30.7	15,426	823,515
1973	23,272	22,424	0	1,117	44,579	39.2	14,736	925,952
1974	45,745	24,719	63	1,268	69,133	50.4	13,232	869,059
1976	81,628	40,003	327	2,042	119,262	89.5	7,461	742,482
1977	86,037	47,189	981	2,291	129,954	101.0	0	664,617
1978	97,866	54,318	1,401	2,736	148,047	119.7	0	664,144
1979	102,048	62,812	2,169	2,960	159,731	174.0	393	805,953

SOURCES: Bureau of Mines, Minerals Yearbook--Metals, Minerals, and Fuels, 1947 through 1975 (Washington, D.C.: annually), Natural Gas Section, Table 16 (1975); and Bureau of Mines, special release (1976, 1977, and 1978 data); and U.S. Department of Energy, Natural Gas Production and Consumption 1979, (Washington, D.C.: annually) January 1981.

TABLE XIX-8. PRODUCTION OF SYNTHETIC NATURAL GAS AT CONSUMERS POWER COMPANY'S MARYSVILLE SNG PLANT BY MONTH: 1975-1979

(In thousands of cubic feet at 14.73 PSIG)

Month	Year 1975	1976	1977	1978	1979
January	7,024,513	6,873,355	5,992,839	2,463,415	1,912,464
February	5,021,119	6,226,466	5,296,749	2,085,863	1,505,067
March	4,674,565	4,618,923	6,354,009	2,351,936	1,380,965
April	6,803,708	3,376,195	2,235,411	730,264	0
May	6,798,791	4,425,447	0	0	0
June	1,752,392	5,431,891	3,160,746	0	0
July	2,374,697	5,051,170	3,176,918	1,630,270	0
August	6,760,202	4,734,832	3,027,598	2,441,129	0
September	6,725,410	3,051,236	2,877,913	0	0
October	6,608,693	3,629,950	2,818,442	1,925,806	0
November	5,842,241	5,684,299	2,174,487	1,628,098	0
December	6,343,416	6,252,708	3,018,162	2,224,749	0

SOURCE: Consumers Power Company, special release.
NOTE: The Marysville plant has been mothballed for a period of 3 to 5 years.

TABLE XIX-9. PRODUCTION OF NATURAL GAS LIQUIDS FOR FUEL AND CHEMICAL USE AT NATURAL GAS PROCESSING PLANTS AND REFINERIES IN MICHIGAN: 1968-1980

(Thousand barrels)

	Natural gas processing plants				Crude oil refineries	
Year	Propane	Butanes[a]	Natural gasoline[b]	Plant condensate	Propane	Butanes[a]
1968	887	497	1,051	15	1,381	63
1969	771	426	909	12	1,418	99
1970	667	509	591	7	1,357	83
1971	648	327	594	4	1,497	45
1972	523	310	387	4	1,604	110
1973	463	228	366	4	1,224	106
1974	471	378	462	0	1,253	126
1975	581	767	654	0	1,248	2
1976	536	679	3,497	0	1,351	385
1977	565	768	6,566	0	1,185	299
1978	597	909	8,666	0	1,282	40
1979			11,188[c]		1,395	22
1980					1,391	

SOURCE: Bureau of Mines, Mineral Yearbook-Metals, Minerals and Fuels, 1965 through 1975 (Washington, D.C.: annually), Natural Gas Liquids section, Tables 6 and 13 and special release (1976, 1977, 1978, and 1979).

a. Includes propane-butane mixture.

b. Includes isopentane.

c. Total of Propane, butanes, natural gasoline, and plant condensate; 1980 data not available.

TABLE XIX-10. SALES OF LIQUEFIED PETROLEUM GASES IN MICHIGAN, BY USE: 1950-1979

(Thousands of gallons)

Year	Residential and commercial[a]	Internal combustion[b]	Industrial[a]	Gas utilities[c]	Miscellaneous uses[d]	Total[d]
1950	42,781	1,075	22,018	27,294	1,416	94,584
1951	42,892	2,011	23,302	27,814	2,660	98,679
1952	41,622	2,543	19,881	14,058	3,243	81,347
1953	42,871	4,252	21,746	11,089	3,246	83,204
1954	47,074	3,515	20,704	6,409	1,940	79,642
1955	52,763	4,347	22,962	6,556	2,506	89,134
1956	59,714	4,043	20,737	4,011	12,653	101,158
1957	62,892	4,851	20,841	4,342	4,971	97,897
1958	72,142	3,256	14,516	2,318	3,605	95,837
1959	88,530	1,538	8,865	1,342	4,472	104,747
1960	95,835	3,881	11,852	995	14,643	127,206
1961	93,155	3,936	10,821	1,743	407	110,062
1962	100,923	4,592	13,380	2,462	445	121,802
1963	128,441	5,454	12,671	5,547	458	152,571
1964	115,546	4,652	15,295	3,613	1,040	140,146
1965	115,907	4,883	22,239	4,029	612	147,670
1966	148,830	6,151	16,007	4,227	1,160	176,375
1967	190,510	10,205	16,595	606	1,093	219,009
1968	197,391	8,524	19,388	2,517	1,036	228,856
1969	229,263	11,195	20,921	2,588	1,877	265,844
1970	221,994	7,202	13,735	3,467	1,545	247,943
1971	242,431	7,922	14,538	3,779	1,730	270,400
1972	289,068	9,105	14,017	5,555	2,313	320,058
1973	287,653	11,032	14,402	5,295	4,757	323,139
1974	270,751	10,961	16,815	5,645	9,077	313,249
1975	257,899	9,857	13,954	3,567	14,463	299,740
1976	285,935	15,509	16,797	3,708	30,865	352,824
1977	270,269	18,579	16,501	5,539	43,983	354,871
1978	258,232	20,939	28,200	2,015	55,340	364,726
1979	169,213	17,487	24,340	836	w	248,343

SOURCE: Bureau of Mines, Minerals Yearbook--Metals, Minerals, and Fuels, 1950 through 1967 (Washington, D.C.: annually), Natural Gas Liquids Section, Table 14 (1967 and 1977 data); and Bureau of Mines, special release (1968 through 1979 data).

a. Heating fuel.

b. Motor fuel.

c. Substitutes for natural gas in mains.

d. Excludes gases used in chemical manufacturing after 1960.

w. Data withheld to avoid disclosing reports for individual companies. These reports are included in totals.

TABLE XIX-11. ESTIMATED PROVED RESERVES OF NATURAL GAS LIQUIDS AND CRUDE OIL IN MICHIGAN AND THE UNITED STATES: 31 DECEMBER 1960-1979

	Natural gas liquids[a] (thousand barrels)				Crude oil (million barrels)	
	Michigan			United States total		
Year	Nonassociated with oil	Associated-dissolved[b]	Total		Michigan	United States
1960	580	1,039	1,619	6,816,059	78	31,613
1961	695	3,621	4,316	7,049,096	79	31,759
1962	2,001	3,423	5,424	7,311,517	75	31,389
1963	2,048	3,278	5,326	7,673,978	69	30,970
1964	969	4,892	5,861	7,746,632	58	30,991
1965	1,565	3,351	4,916	8,023,534	53	31,352
1966	984	3,057	4,041	8,328,966	71	31,452
1967	1,461	2,083	3,544	8,614,231	63	31,377
1968	1,429	2,163	3,592	8,598,108	55	30,707
1969	1,375	2,681	4,056	8,143,174	52	29,632
1970	5,437	4,466	9,903	7,702,941	46	39,001[c]
1971	4,616	7,968	12,584	7,304,227	59	38,063[c]
1972	5,531	13,495	19,026	6,786,559	--	36,339[c]
1973	7,507	17,539	25,046	6,454,707	72	35,300[c]
1974	4,906	15,358	20,264	6,350,449	82	34,250
1975	3,984	16,649	20,633	6,267,830	93	32,682
1976	5,081	17,316	22,397	6,401,967	139	30,942
1977	11,183	34,015	45,198	5,994,365	133	29,486
1978	20,857	44,836	65,693	5,925,852	190	27,804
1979	28,245	43,281	71,526	5,655,323	176	27,051

SOURCE: Bureau of Mines, Minerals Yearbook--Metals, Minerals, and Fuels, 1960 through 1974 (Washington, D.C.: annually), Natural Gas Liquids section, Table 9, and Crude Petroleum and Products section, Table 13 (1975 data); and American Petroleum Institute, special release.

a. Natural gasoline, LP gases, and condensate.

b. Associated natural gas liquids are in contact with crude oil in the reservoir; dissolved natural gas liquids are in solution with crude oil in the reservoir.

c. Includes reserves in the Prudhoe Bay Permo-Triassic reservoir, discovered in 1968 and not included prior to 1970.

TABLE XIX-12. MOTOR FUEL CONSUMPTION IN MICHIGAN, BY TYPE OF FUEL AND HIGHWAY-NONHIGHWAY USES: 1947-1979

(In millions of gallons)

Year	Highway			Gasoline nonhighway	Gasoline losses[b]	Total[c]
	Gasoline	Other[a]	Total			
1947	n.a.	n.a.	1,345	255	22	1,622
1948	n.a.	n.a.	1,461	244	24	1,729
1949	1,521	8	1,529	223	24	1,776
1950	1,663	9	1,672	265	27	1,964
1951	1,750	12	1,762	298	29	2,089
1952	1,818	12	1,830	278	29	2,137
1953	1,991	17	2,008	278	32	2,318
1954	2,043	18	2,061	183	34	2,278
1955	2,217	20	2,237	188	36	2,461
1956	2,249	23	2,272	198	36	2,506
1957	2,324	26	2,350	213	25	2,588
1958	2,338	26	2,364	208	24	2,596
1959	2,428	39	2,467	201	26	2,694
1960	2,517	47	2,564	194	27	2,785
1961	2,528	53	2,581	186	29	2,796
1962	2,610	62	2,672	183	29	2,884
1963	2,790	76	2,866	185	29	3,080
1964	2,969	90	3,059	188	31	3,278
1965	3,130	111	3,241	197	32	3,470
1966	3,292	131	3,423	225	34	3,682
1967	3,384	143	3,527	246	34	3,807
1968	3,634	164	3,798	277	37	4,112
1969	3,843	188	4,031	297	39	4,367
1970	3,908	189	4,097	199	40	4,336
1971	4,063	219	4,282	183	42	4,507
1972	4,338	249	4,587	182	45	4,813
1973	4,524	286	4,810	197	48	5,055
1974	4,324	276	4,600	155	44	4,799
1975	4,386	264	4,650	182	45	4,878
1976	4,640	303	4,943	183	47	5,173
1977	4,710	338	5,048	176	49	5,273
1978	4,853	367	5,220	175	51	5,446
1979	4,571	360	4,931	128	58	5,117

SOURCE: Federal Highway Administration, Highway Statistics, 1947 through 1974 (Washington, D.C.: annually), Tables MF-21, 25, and 26 (1974), and special release (1975-1979 data).

a. Diesel fuel and liquified petroleum gas.

b. Evaporation, handling, and so forth.

c. Excludes aviation jet fuels purchased by the federal government for military use.

n.a.: not available.

TABLE XIX-13. CONSUMPTION OF SELECTED PETROLEUM PRODUCTS IN MICHIGAN: 1952-1979

(Thousands of barrels)

Year	Kerosene[a]	Distillate fuel oil	Residual fuel oil[b]
1952	5,530	22,268	14,153
1953	5,109	22,351	14,809
1954	5,388	24,625	14,675
1955	5,278	27,402	15,387
1956	4,893	29,071	16,008
1957	4,221	28,995	15,330
1958	6,004	29,385	9,340
1959	7,491	28,387	13,498
1960	4,064	30,464	11,242
1961	6,158	30,547	9,896
1962	6,973	31,131	9,275
1963	5,960	30,471	9,746
1964	5,788	29,576	8,905
1965	5,884	31,079	8,011
1966	4,577	32,127	7,634
1967	2,882	37,376	5,415
1968	2,927	36,601	5,667
1969	2,785	37,473	6,704
1970	3,124	38,108	10,059
1971	3,018	41,684	11,605
1972	2,645	48,660	11,388
1973	1,995	47,146	14,560
1974	1,600	44,204	14,876
1975	1,390	41,883	19,239
1976	1,567	43,826	20,656
1977	1,334	44,659	21,345
1978	1,360	45,461	24,871
1979	1,535	31,642	18,799

SOURCE: Bureau of Mines, Minerals Yearbook--Metals, Minerals, and Fuels, 1947 through 1975 (Washington, D.C.: annually), Crude Petroleum and Products section, Table 24; and Bureau of Mines, special release, (1967 through 1979 data).

a. Excludes jet fuel.

b. Includes crude oil used directly as residual.

TABLE XIX-14. CRUDE RUNS TO STILLS, REFINERY RECEIPTS OF CRUDE OIL, AND PRODUCTION OF GASOLINE IN MICHIGAN: 1952-1979

(Thousands of barrels)

Year	Crude runs to stills	Refinery receipts			Gasoline production
		Michigan crude	Other U.S. crude	Canadian crude	
1952	40,676	13,605	27,321	0	16,929
1953	42,067	12,880	30,059	0	16,942
1954	41,846	13,559	28,860	0	16,140
1955	45,595	12,646	33,589	0	17,894
1956	50,708	11,681	38,356	1,766	19,502
1957	49,414	11,227	37,499	1,535	19,525
1958	44,924	9,412	34,926	1,351	18,294
1959	50,408	10,180	38,611	1,888	19,908
1960	49,768	15,610	31,764	2,542	20,988
1961	47,973	18,453	23,815	5,622	20,513
1962	49,152	17,320	24,342	7,437	21,431
1963	51,380	18,304	26,857	6,227	23,710
1964	51,659	17,423	29,282	4,971	24,989
1965	52,192	14,759	32,184	5,229	25,486
1966	52,949	14,139	32,189	6,686	27,782
1967	50,150	12,800	29,204	8,411	25,664
1968	53,525	12,649	26,249	14,461	26,478
1969	51,877	11,640	27,833	12,547	26,560
1970	53,396	11,159	24,504	17,799	26,804
1971	56,395	10,847	27,381	17,932	27,399
1972	58,447	12,306	28,446	17,780	27,047
1973	44,853	11,624	13,974	19,409	20,509
1974	43,255	12,231	14,951	15,943	19,543
1975	41,318	17,032	15,336	9,248[a]	19,404
1976	45,417	22,123	12,204	11,032	21,230
1977	47,161	25,556	14,247	7,445	21,453
1978	48,670	28,441	12,310	7,736	19,899
1979	47,656	27,520	12,366	7,808	n.a.

SOURCE: Bureau of Mines, Minerals Yearbook--Metals, Minerals, and Fuels, 1947 through 1975 (Washington, D.C.: annually), Crude Petroleum and Products section, Tables 16 and 24 (1975 data); and Bureau of Mines, special release (1976, 1977, 1978, and 1979 data).

a. Includes 418,000 barrels of non-Canadian foreign crude.
n.a.: Not available

TABLE XIX-15. PRODUCING OIL WELLS, AVERAGE PRODUCTION, AND VALUE OF CRUDE PETROLEUM AT WELLS IN MICHIGAN: 1947-1979

Year	Approximate number of oil wells producing 31 December	Average production per well per day[a] (barrels)	Total value at wells (thousands of dollars)	Average value per barrel (dollars)
1947	3,540	12.6	34,540	2.13
1948	3,550	13.0	48,250	2.86
1949	3,820	12.3	45,420	2.75
1950	3,950	11.2	42,730	2.70
1951	3,800	9.8	37,870	2.72
1952	3,980	9.3	35,250	2.66
1953	4,000	8.4	35,870	2.92
1954	4,173	8.1	35,600	2.96
1955	4,034	7.5	32,900	2.92
1956	4,191	7.1	30,824	2.87
1957	3,995	6.8	31,117	3.06
1958	3,895	6.4	27,366	2.94
1959	4,130	7.1	30,688	2.94
1960	4,348	10.3	46,266	2.91
1961	4,301	12.0	55,182	2.92
1962	4,282	10.9	48,775	2.85
1963	4,234	10.3	45,523	2.85
1964	4,151	10.2	43,839	2.81
1965	4,036	9.9	41,091	2.79
1966	4,141	9.6	40,913	2.87
1967	4,004	9.2	39,455	2.89
1968	4,273	8.6	38,287	2.95
1969	3,878	8.2	37,494	3.07
1970	4,311	7.8	36,246	3.10
1971	4,046	7.8	38,859	3.27
1972	3,685	9.2	41,556	3.20
1973	3,733	10.8	59,413	4.07
1974	4,201	12.4	154,746	8.59
1975	3,655	17.0	262,352	10.74
1976	3,770	22.4	329,637	10.84
1977	3,903	23.5	362,722	11.00
1978	3,890	24.4	427,881	12.34
1979	3,890	24.6	520,832	14.94

SOURCE: Bureau of Mines, Minerals Yearbook--Metals, Minerals, and Fuels, 1947 through 1975 (Washington, D.C.: annually), Crude Petroleum and Products section, Tables 10 and 55 (1975 data); and Bureau of Mines, special release (1976, 1977, 1978, and 1979 data).

a. Based on average number of wells during the year.

TABLE XIX-16. DISTRIBUTION OF BITUMINOUS COAL AND LIGNITE FOR CONSUMPTION IN MICHIGAN, BY TYPE OF CUSTOMER: 1946 AND 1957-1980

(Thousand short tons)

Year	Electric utilities	Coke and gas plants	Retail dealers	All others	Total
1946	--	3,040[a]	8,460	13,709[b]	25,209
1957	9,838	4,877	3,368	8,172	26,255
1958	8,502	3,082	2,858	7,956	22,384
1959	10,675	4,489	2,892	9,175	27,231
1960	10,191	4,517	2,458	7,910	25,076
1961	9,997	4,121	2,514	7,695	24,327
1962	12,276	4,249	2,358	8,372	27,255
1963	13,582	4,813	2,154	9,339	29,888
1964	14,690	5,309	1,771	9,166	30,936
1965	16,966	5,338	2,032	9,075	33,411
1966	18,464	5,012	1,831	9,463	34,770
1967	19,605	4,591	1,485	9,278	34,959
1968	20,832	4,914	1,474	9,567	36,787
1969	21,432	4,823	1,166	8,253	35,674
1970	23,244	4,942	1,008	7,439	36,633
1971	19,416	4,861	817	7,531	32,625
1972	21,424	5,378	649	7,634	35,085
1973	20,294	4,876	561	5,954	31,685
1974	20,623	3,835	351	4,441	29,250
1975	21,802	5,343	262	3,883	31,290
1976	21,197	4,493	248	3,867	29,805
1977[c]	21,165	4,029	160	3,447	28,801
1978[c]	21,192	2,928	73	3,415	27,608
1979[c]	24,047	4,026	35	4,276	32,385
1980	23,003	3,339[d]	308[e]	4,554	31,206

SOURCE: Bureau of Mines, *Minerals Yearbook--Metals, Minerals, and Fuels*, 1947 through 1975 (Washington, D.C.: annually), Crude Petroleum and Products section, Tables 16 and 24 (1975 data); Bureau of Mines, special (1976-1979 data); thereafter, U.S. Department of Energy, special release.

a. By product and water gas plants.

b. Industrial; includes electric utilities.

c. Prior to the fourth quarter of 1977, data collection was on a voluntary basis, with some estimating by the Bureau of Mines. Reporting now is mandatory. Since the third quarter of 1977, only actual company figures are tallied to develop state and national totals. The data for 1977 and 1978 are not strictly comparable with each other, therefore, nor with previous years' figures.

d. Coke plants only.

e. Residential and commercial.

TABLE XIX-17. OIL AND NATURAL GAS PRODUCTION IN MICHIGAN, BY COUNTY: 1979

County	Oil (barrels)	Natural gas (000 cubic feet)	County	Oil (barrels)	Natural gas (000 cubic feet)
Allegan	144,968	56,856	Manistee	8,460,019	34,961,685
Antrim	185,789	756,919	Mason	211,936	2,034,360
Arenac	189,294	0	Mecosta	23,346	10,302
Barry	6,162	0	Midland	194,782	0
Bay	192,255	0	Missaukee	883,227	876,676
Benzie	108,355	98,816	Monroe	3,198	0
Calhoun	817,321	4,353,303	Montcalm	78,131	0
Cass	17,723	0	Montmorency	1,375	0
Cheboygan	3,931	0	Muskegon	8,029	0
Clare	417,295	424,107	Newaygo	16,620	0
Crawford	1,542,332	3,456,516	Oakland	7,128	39,062
Eaton	398,985	4,169,961	Oceana	109,739	0
Genesee	8,996	0	Ogemaw	645,198	120,255
Gladwin	274,100	0	Osceola	177,799	10,280
Grand Traverse	4,525,299	47,375,339	Oscoda	732	0
Gratiot	9,002	93	Otsego	6,278,046	15,511,961
Hillsdale	788,418	2,749,854	Ottawa	6,681	126,540
Ingham	1,233,150	2,603,852	Presque Isle	1,356	0
Isabella	207,029	14,417	Roscommon	352,533	194,902
Jackson	37,605	1,792,859	Saginaw	14,178	0
Kalamazoo	404	0	Shiawassee	13,365	0
Kalkaska	3,882,057	27,262,410	St. Clair	604,559	1,710,034
Kent	88,077	0	Tuscola	65,117	0
Lake	84,238	0	Van Buren	13,775	0
Lapeer	155,591	0	Washtenaw	0	53,255
Lenawee	151	0	Wayne	8,543	0
Livingston	3,887	1,236,174	Wexford	738,632	4,213,018
Macomb	7,009	2,736,974			
			TOTAL	34,746,672	157,293,719

SOURCE: Department of Natural Resources, Michigan's Oil and Gas Fields, 1979, Annual Statistical Summary 30 (Lansing: 1980), p. 8.

TABLE XIX-18. OIL PRODUCTION IN MICHIGAN, BY GEOLOGIC SYSTEM AND FORMATION: 1977, 1978, 1979 AND CUMULATIVE THROUGH 1979

	First year of production	Production (in barrels) 1977	1978	1979	Cumulative thru 1979
Mississippian					
Marshall	1938	937	819	958	84,204
Berea	1925	22,261	19,810	22,411	2,529,548
Devonian					
Traverse	1927	490,336	425,975	424,597	106,665,092
Dundee-Reed City	1927	1,422,637	1,263,315	1,604,906	341,229,283
Detroit River	1939	2,269,774	2,320,982	2,740,009	70,867,445
Silurian					
Salina-Niagaran	1952	26,832,419	28,935,064	28,524,674	161,459,651
Ordovician					
Trenton-Black River	1935	1,926,139	1,697,522	1,429,117	120,957,221
Total barrels, all formations		32,964,503	34,663,487	34,746,672	803,792,444

SOURCE: Michigan Department of Natural Resources, Michigan's Oil and Gas Fields, 1978 and 1979, Annual Statistical Summary 30 (Lansing: 1979 and 1980, Tables 8 and 10.

TABLE XIX-19. GAS PRODUCTION IN MICHIGAN, BY GEOLOGIC SYSTEM AND FORMATION: 1977, 1978, 1979, AND CUMULATIVE THROUGH 1979

	First year of production	Production (In thousands of cubic feet) 1977	1978	1979	Cumulative thru 1979
Mississippian					
Stray-Marshall	1931	43,051	41,128	33,952	213,656,722
Berea	1936	59,301	30,132	8,093	10,990,672
Devonian					
Antrim Shale	1947	170,395	150,434	139,212	1,959,658
Traverse	1934	12,826	0	64,429	9,048,289
Dundee-Reed City	1929	32,146	23,184	114,563	41,517,206
Detroit River	1946	1,123,994	1,011,884	1,725,677	75,000,346
Silurian					
Salina-Niagaran	1929	123,858,773	141,876,290	150,971,034	974,584,854
Ordovician					
Trenton-Black River	1954	7,925,966	7,402,205	6,673,294	207,444,618
Total Mcf, All formations		133,226,452	150,535,257	157,293,719	1,554,478,962[a]

SOURCE: Michigan Department of Natural Resources, Michigan's Oil and Gas Fields, 1978 and 1979, Annual Statistical Summary 30 (Lansing: 1979 and 1980, Tables 9 and 11.

a. Does not include 3,050 Mcf of unassigned gas from early records.

TABLE XIX-20. TYPICAL ELECTRIC BILLS FOR RESIDENTIAL SERVICE IN MICHIGAN CITIES OF 2,500 OR MORE INHABITANTS: 1 JANUARY 1980

	250[a] kwh	500[a] kwh	750[b] kwh	1000[b] kwh	2500[c] kwh
Alpena Power Co.	11.68	19.51	27.24	34.97	81.35
Bay City Electric Light Department	12.49	22.60	31.59	42.18	102.87
Charlevoix Municipal Utilities	14.05	26.11	38.16	50.22	122.55
Chelsea Electric and Water Department	11.74	22.47	30.42	41.16	105.58
Coldwater Board of Public Utilities	14.76	27.07	38.60	50.92	124.64
Consumers Power Co.	15.76	28.88	40.82	54.33	143.39
Detroit Edison Co.	13.71	24.77	31.35	43.21	105.82
Dowagiac Board of Electric Facilities	12.79	23.33	32.30	40.23	87.83
Eaton Rapids, City of	13.06	23.51	34.19	45.57	114.90
Edison Sault Electric Company	8.91	15.32	21.73	28.13	66.58
Escanaba	16.25	29.80	42.30	54.80	129.80
Gladstone, City of	18.37	32.28	36.29	50.18	129.38
Grand Haven Board of Light and Power	14.04	25.43	37.45	49.46	125.30
Hillsdale Board of Public Works	15.96	29.43	42.89	56.35	133.30
Holland Board of Public Works	12.38	22.25	28.11	37.99	97.24
Indiana and Michigan Electric Company	11.56	19.61	25.86	33.91	82.22
Lake Superior District Power Company	13.33	23.36	30.33	40.37	98.88
L'Anse, Village of	15.38	26.15	36.43	46.70	108.35
Lansing Board of Water & Light[a]	12.48	22.56	33.39	44.21	113.68
Lowell Light & Power	14.09	26.47	36.86	49.24	123.56
Marquette Board of Light and Power	16.78	30.01	43.22	56.44	121.20
Marshall City Water & Electric Works	15.01	27.47	41.08	53.54	127.69
Michigan Power Co.	13.10	23.20	33.30	43.40	104.00
Negaunee, City of	14.35	24.85	35.35	45.85	108.85

TABLE XIX-20. TYPICAL ELECTRIC BILLS FOR RESIDENTIAL SERVICE IN MICHIGAN CITIES OF 2,500 OR MORE INHABITANTS: 1 JANURAY 1980 (cont.)

	250[a] kwh	500[a] kwh	750[b] kwh	1000[b] kwh	2500[c] kwh
Niles Board of Public Works	14.37	23.93	32.49	41.04	87.58
Norway Electric Light Department	9.60	17.10	22.85	30.35	74.60
Paw Paw, Village of	11.02	20.91	30.80	40.69	100.13
Petoskey Municipal Light Plant	12.59	23.27	33.96	45.65	108.77
Portland Electric Department	18.51	32.21	44.72	56.73	128.77
Saint Louis Light Plant	14.90	27.31	36.71	49.11	123.54
South Haven Board of Public Works	13.11	21.69	27.11	35.48	84.24
Sturgis, City of	13.34	23.23	32.37	41.01	92.84
Traverse City Power Department	14.06	25.62	35.99	47.79	114.65
Upper Peninsula Power Company	17.62	31.85	40.06	54.29	136.58
Wakefield, City of	11.85	22.19	32.53	42.87	104.93
Wisconsin Public Serv. Corporation	11.73	20.46	25.81	34.14	73.83
Wyandotte Department of Municipal Service[d]	17.11	32.36	47.61	62.86	154.36
Zeeland Board of Public Works	15.25	28.26	38.45	51.46	129.48

SOURCE: U.S. Department of Energy, Energy Data Report, *Typical Electric Bills-1980* (Washington, D.C.: 1980), Table 10.

a. Lighting, Appliances, Refrigeration and Cooking.
b. Lighting, Appliances, Refrigeration, Cooking and Water
c. Lighting, Appliances, Refrigeration, Cooking, Water Heating and/or Space Heating.
d. Lamp replacement service included.

TABLE XIX-21. AVERAGE ELECTRICITY USED BY RESIDENTIAL CONSUMERS IN MICHIGAN CITIES OF 50,000 OR MORE INHABITANTS: 1973 AND 1978

City	Kwh per year 1973	Kwh per year 1978	City	Kwh per year 1973	Kwh per year 1978
Ann Arbor	7,743	7,450	Redford Twp.	5,262	5,063
Dearborn	5,262	5,063	Roseville	6,983	6,738
Dearborn Hgts	5,262	5,063	Royal Oak	8,239	7,728
Detroit	5,262	5,063	Saginaw	7,038	5,503
Flint	7,278	5,641	St. Clair Shores	6,983	6,738
Grand Rapids	6,374	4,657	Southfield	8,239	7,728
Kalamazoo	6,953	5,546	Sterling Hgts.	6,983	6,738
Lansing[a]	6,681	6,748	Taylor	5,262	5,063
Lincoln Park	5,262	5,063	Warren	6,983	6,738
Livonia	7,103	6,893	Westland	5,262	5,063
Pontiac	4,965	5,144	Wyoming	6,374	4,933

SOURCE: U.S. Department of Energy, Energy Data Report, Typical Electric Bills,1979 (Washington, D.C.: annually, Table 12

a. Publicly owned utility.

TABLE XIX-22. INSTALLED ELECTRIC GENERATING CAPACITY OF ELECTRIC UTILITIES AND INDUSTRIAL PLANTS IN MICHIGAN, BY TYPE OF PRIME MOVER: 31 DECEMBER 1966-1980

(In thousands of kilowatts)

Year	Electric utilities Fuel	Electric utilities Hydro	Industrial plants	Total
1966	8,422	356	1,050	9,827
1967	8,930	356	1,057	10,343
1968	9,766	356	1,050	11,173
1969	10,480	351	1,032	11,862
1970	10,830	348	994	12,171
1971	11,842	345	1,014	13,201
1972	12,562	344	1,007	13,913
1973	13,969	1,993[a]	1,023	16,985
1974	16,605	2,322[a]	1,019	19,946
1975	16,629	2,321[a]	1,009	19,959
1976	16,714	2,321[a]	992	20,027
1977	17,304	2,322[a]	987	20,614
1978	18,685	2,322[a]	987	21,994
1979	19,594	2,322[a]	884	22,800
1980	20,370	2,322[a]	n.a.	n.a.

SOURCE: Bureau of the Census, Statistical Abstract of the United States, 1967 through 1978 (Washington, D.C.: annually), Table 918 (1974); thereafter U.S. Department of Energy, special release (1976-1980).

a. Includes the pump storage facility at Ludington where water is pumped up into a reservoir at night and released to generate electricity to meet peak load requirements during the day.

TABLE XIX-23. PRODUCTION OF ELECTRIC ENERGY BY ELECTRIC UTILITIES BY HYDRO AND STEAM PLANTS IN MICHIGAN: 1947-1980

(Thousands of kilowatt-hours)

Year	Hydro	Total fuel	Total
1947	1,515,260	10,286,151	11,801,411
1948	1,317,595	11,439,182	12,756,777
1949	1,369,281	11,828,945	13,198,226
1950	1,657,676	13,657,865	15,315,541
1951	1,887,163	14,748,717	16,635,880
1952	1,742,813	15,514,789	17,257,602
1953	1,703,471	18,030,717	19,734,188
1954	1,794,827	17,741,426	19,536,253
1955	1,570,501	20,794,422	22,364,923
1956	1,657,054	21,977,346	23,634,400
1957	1,552,989	23,279,559	24,832,548
1958	1,476,445	22,566,773	24,043,218
1959	1,727,293	24,829,808	26,557,101
1960	1,817,341	25,855,001	27,672,342
1961	1,635,689	26,676,370	28,312,059
1962	1,574,044	30,500,999	32,075,043
1963	1,246,431	33,705,179	34,951,610
1964	1,415,103	36,580,829	37,995,932
1965	1,667,243	40,109,476	41,776,719
1966	1,670,859	43,761,330	45,432,189
1967	1,799,231	45,833,170	47,632,901
1968	1,739,363	50,362,597	52,101,960
1969	1,732,982	53,551,867	55,284,849
1970	1,580,343	54,700,398	56,280,741
1971	1,620,622	57,459,327	59,079,949
1972	1,643,545	59,454,562	61,098,107
1973	889,714	61,826,056	62,715,770
1974	1,050,699	60,401,284	61,451,983
1975	989,369	67,168,344	68,157,713
1976	926,133	68,136,377	60,062,510
1977	804,000	67,954,000	68,756,000
1978	949,912	73,584,426	74,534,338
1979	1,184,940	77,044,618	78,229,558
1980	1,083,328	73,766,222	74,849,550

SOURCE: Federal Power Commission, special release; and U.S. Department of Energy, Power Production, Fuel Consumption, and Installed Capacity Data, (Washington, D.C.: annual) 1980, Table 36.

TABLE XIX-24. PRODUCTION OF ELECTRIC ENERGY BY ELECTRIC UTILITIES BY STEAM IN MICHIGAN, BY KIND OF FUEL: 1947-1980

(Thousands of kilowatt-hours)

Year	Coal	Oil[a]	Natural gas	Nuclear
1947	10,091,869	193,899	383	--
1948	11,166,179	271,284	1,791	--
1949	11,545,109	278,392	5,444	--
1950	13,388,001	262,428	7,436	--
1951	14,468,102	266,522	14,093	--
1952	15,239,622	246,627	28,540	--
1953	17,737,571	255,075	38,071	--
1954	17,456,532	238,257	46,637	--
1955	20,478,674	279,575	36,173	--
1956	21,639,845	294,509	42,992	--
1957	22,925,155	291,124	63,280	--
1958	22,190,144	276,423	100,206	--
1959	24,429,812	241,504	158,492	--
1960	25,143,928	224,771	486,302	--
1961	25,689,641	237,540	749,189	--
1962	30,019,132	241,356	240,482	29
1963	33,171,041	224,283	187,504	122,351
1964	35,980,122	186,144	222,085	192,478
1965	39,472,433	194,419	262,017	180,607
1966	42,880,297	305,813	232,561	342,659
1967	44,495,793	460,034	375,330	502,013
1968	48,938,596	480,930	517,470	425,601
1969	51,346,646	603,897	1,200,274	401,050
1970	46,578,776	2,553,271	5,193,659	374,692
1971	47,187,538	4,277,233	5,607,036	387,520
1972	47,953,045	4,716,918	4,659,418	2,125,181
1973	48,752,756	6,326,295	3,767,128	2,979,877
1974	48,393,892	7,433,244	4,158,308	415,840
1975	48,180,133	8,336,771	3,475,317	7,176,123
1976	46,813,611	8,351,456	3,070,759	9,900,551
1977	47,624,000	8,365,000	1,731,000	10,231,000
1978	47,613,638	10,892,005	1,974,623	13,104,159
1979	51,363,534	8,346,537	2,194,043	15,139,195
1980	50,450,279	5,603,183	1,821,776	15,890,986

SOURCE: Federal Power Commission, special release; and U.S. Department of Energy, Power Production, Fuel Consumption and Installed Capacity Data, (Washington, D.C.: annual) 1980, Table 36.

a. Includes distillate and residual and crude burned as residual.

TABLE XIX-25. FOSSIL FUELS CONSUMED IN THE PRODUCTION OF ELECTRIC ENERGY BY ELECTRIC UTILITIES IN MICHIGAN, BY KIND OF FUEL: 1947-1980

Year	Coal[a]	Oil[b]	Gas[c]
1947	5,489,879	415,019	4,942
1948	6,094,489	604,402	15,527
1949	6,006,367	548,766	57,035
1950	6,690,531	511,992	73,200
1951	7,137,483	520,676	141,349
1952	7,414,756	474,303	285,940
1953	8,418,570	496,156	366,404
1954	7,946,133	459,799	425,562
1955	9,251,115	537,571	332,415
1956	9,631,375	567,966	413,409
1957	10,035,173	556,013	591,108
1958	9,231,328	528,549	1,073,800
1959	10,112,980	475,034	1,642,129
1960	10,299,737	439,867	5,208,898
1961	10,282,542	459,840	8,178,632
1962	12,003,368	451,740	2,601,428
1963	13,267,743	423,334	2,032,471
1964	14,441,995	369,453	2,384,103
1965	16,122,593	383,828	2,988,767
1966	18,148,464	733,126	2,494,984
1967	19,014,993	1,136,946	4,718,078
1968	20,820,484	1,175,483	6,842,091
1969	21,952,162	1,436,248	15,495,248
1970	20,123,939	5,479,030	64,406,787
1971	20,507,741	8,746,639	69,808,590
1972	20,420,769	9,641,758	58,899,385
1973	20,507,873	12,040,590	48,016,628
1974	20,755,361	13,713,367	56,172,035
1975	20,913,429	15,674,055	56,710,314
1976	20,369,131	15,573,247	53,510,229
1977	21,095,000	15,760,000	32,133,000
1978	21,494,695	20,423,409	36,333,647
1979	23,133,536	15,609,570	37,859,808
1980	22,150,263	10,400,333	26,368,103

SOURCE: Federal Power Commission, special release; and U.S. Department of Energy, *Power Production, Fuel Consumption, and Installed Capacity Data*, (Washington, D.C.: annual) 1980, Table 8.

a. Short tons.

b. Barrels of 42 gallons. Includes distillate and residual and crude burned as residual.

c. Thousands of cubic feet.

TABLE XIX-26. ELECTRIC UTILITY INDUSTRY SALES TO ULTIMATE CONSUMERS IN MICHIGAN: 1961-1979

(Millions of kilowatt hours)

		Commercial and industrial					
Year	Residential	Small light and power	Large light and power	Street and highway lighiting	Other public authorities	Inter-departmental	Total
1961	9,213	5,433	11,915	229	320	40	27,150
1962	9,588	5,851	13,495	244	370	37	29,585
1963	9,907	6,268	15,064	252	431	36	31,958
1964	10,526	6,774	16,531	268	458	42	34,599
1965	11,294	7,232	18,608	279	473	48	37,934
1966	12,285	7,888	20,727	294	502	50	41,746
1967	13,188	8,364	21,143	431	954	52	44,131
1968	14,344	9,055	23,189	459	997	53	48,097
1969	15,629	9,816	24,858	476	1,044	52	51,875
1970	16,878	10,505	24,277	497	980	61	53,198
1971	17,896	11,060	26,279	500	998	68	56,801
1972	19,054	11,907	28,567	527	1,033	78	61,166
1973	20,164	12,965	31,460	542	1,067	81	66,279
1974	20,218	12,648	29,036	584	1,115	68	63,669
1975	20,807	12,949	27,057	611	1,143	78	62,645
1976	21,345	13,465	31,067	613	1,197	85	67,772
1977	21,774	13,924	32,254	612	1,180	101	69,845
1978	21,964	14,112	33,182	610	1,213	99	71,180
1979	22,085	14,631	32,907	625	1,280	121	71,649

SOURCE: Edison Electric Institute, Statistical Yearbook of the Electric Utility Industry, 1961 through 1975 (New York, N.Y.: annually), Table 22-S (1975 data); and Edison Electric Institute, special release (1976,1977, 1978, and 1979 data).

TABLE XIX-27. SALES OF ELECTRIC ENERGY TO INDUSTRIAL CONSUMERS IN MICHIGAN AND THE UNITED STATES, BY MONTH: 1970-1979

(Millions of killowatt-hours)

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Michigan						
1970	2,087	2,046	2,087	2,115	2,220	2,243	2,186	2,268	2,197	1,877	1,809	2,046
1971	2,180	2,289	2,225	2,225	2,299	2,332	2,222	2,288	2,342	2,357	2,313	2,220
1972	2,215	2,437	2,372	2,443	2,495	2,784	2,395	2,508	2,584	2,662	2,655	2,524
1973	2,568	2,734	2,659	2,749	2,748	2,784	2,888	2,774	2,907	2,853	2,754	2,495
1974	2,364	2,418	2,349	2,467	2,499	2,632	2,553	2,669	2,709	2,744	2,631	2,227
1975	2,184	2,272	2,208	2,196	2,305	2,379	2,395	2,570	2,622	2,637	2,560	2,472
1976	2,498	2,641	2,750	2,784	2,748	2,881	2,847	2,827	2,883	2,768	2,827	2,745
1977	2,622	2,760	2,846	2,814	2,956	3,002	2,869	3,020	3,002	2,761	2,930	2,761
1978	2,756	2,754	2,773	2,966	2,970	3,063	2,971	3,094	3,118	3,190	3,055	2,899
1979	3,031	2,995	3,162	2,903	3,073	3,115	2,987	2,900	2,880	2,868	2,712	2,516
1980	2,544	2,693	2,713	2,605	2,277	2,242	2,414	2,520	2,598	2,762	2,645	2,543
1981	2,357	2,624	2,707	2,647	2,650	2,803	2,732	2,723	2,576	2,495	2,445	
						United States						
1970	46,440	45,750	47,313	47,003	48,153	49,226	48,433	49,077	49,176	48,506	46,952	47,275
1971	47,501	47,421	48,844	48,792	49,334	50,202	49,310	49,262	50,214	50,130	49,638	49,062
1972	50,163	50,151	51,474	51,406	52,956	57,498	52,495	54,611	55,218	55,744	54,938	53,428
1973	55,274	54,591	55,866	55,937	56,838	57,368	57,152	58,865	59,178	60,514	58,433	56,070
1974	55,754	54,978	55,999	56,497	57,386	58,077	57,899	59,803	60,366	60,053	57,361	53,878
1975	54,280	54,328	54,437	52,526	54,767	55,841	55,525	57,868	58,619	58,815	58,223	57,433
1976	57,463	58,228	60,516	59,967	61,271	62,920	62,657	64,184	64,653	64,208	63,106	62,842
1977	61,481	60,439	63,294	63,278	65,418	66,064	64,622	66,300	66,362	66,295	64,833	63,906
1978	64,300	60,817	61,524	63,129	66,746	69,098	67,397	69,402	70,067	71,259	69,702	67,767
1979	67,956	66,847	68,770	68,777	70,421	70,968	69,938	71,058	70,075	71,444	69,787	67,283
1980	67,532	68,508	69,058	67,908	67,235	66,739	65,531	67,377	69,570	69,413	67,613	68,517
1981	67,087	67,394	68,599	68,136	68,761	71,615	71,716	72,021	70,986	69,132	66,139	

SOURCE: Energy Information Administration, U.S. Department of Energy, Energy Data Report (Washington, D.C.: monthly, various issues).

TABLE XIX-28. SALES OF ELECTRIC ENERGY TO RESIDENTIAL CONSUMERS IN MICHIGAN AND THE UNITED STATES, BY MONTH: 1970-1979

(Millions of killowatt-hours)

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Michigan						
1970	1,593	1,581	1,470	1,458	1,284	1,260	1,350	1,422	1,400	1,389	1,377	1,521
1971	1,692	1,715	1,609	1,509	1,360	1,352	1,418	1,478	1,492	1,495	1,451	1,598
1972	1,793	1,812	1,697	1,647	1,449	1,527	1,503	1,587	1,595	1,522	1,603	1,763
1973	1,886	1,865	1,751	1,625	1,504	1,515	1,596	1,716	1,810	1,562	1,649	1,767
1974	1,977	1,837	1,734	1,631	1,538	1,523	1,645	1,745	1,687	1,558	1,589	1,888
1975	2,056	1,739	1,797	1,741	1,512	1,559	1,796	1,863	1,719	1,608	1,562	1,901
1976	2,225	1,801	1,827	1,612	1,578	1,636	1,767	1,792	1,666	1,618	1,700	2,100
1977	2,329	1,886	1,856	1,631	1,574	1,632	1,814	1,905	1,721	1,240	1,630	2,058
1978	2,296	1,874	1,908	1,708	1,602	1,657	1,740	1,828	1,821	1,758	1,702	1,964
1979	2,326	1,932	1,924	1,710	1,644	1,644	1,769	1,883	1,735	1,624	1,726	1,969
1980	2,239	1,847	1,946	1,782	1,609	1,596	1,858	2,030	1,874	1,726	1,745	2,008
1981	2,382	1,786	1,840	1,653	1,618	1,616	1,952	1,967	1,728	1,674	1,634	--
						United States						
1970	42,544	40,036	37,303	34,921	32,896	35,165	41,993	44,852	44,787	38,611	34,730	39,161
1971	44,554	43,166	40,654	37,477	34,672	38,494	47,000	46,413	46,245	40,972	38,017	41,950
1972	46,251	45,593	43,537	40,428	38,058	45,002	47,763	51,752	51,068	44,384	41,667	47,049
1973	52,840	49,601	46,315	41,821	39,825	44,967	54,123	56,742	56,210	47,207	43,181	46,399
1974	52,846	47,832	46,154	43,294	41,215	46,596	53,435	56,558	53,252	44,177	42,773	50,368
1975	55,546	50,219	47,968	46,883	41,077	45,766	53,972	57,291	54,362	43,024	42,054	50,213
1976	60,126	54,264	47,060	43,563	41,036	44,157	53,671	57,255	53,460	44,762	46,675	56,750
1977	65,332	61,424	50,859	44,414	41,568	48,419	60,969	62,821	57,248	48,741	44,959	54,919
1978	65,547	63,936	58,194	46,928	43,637	50,511	61,327	63,434	61,584	51,108	47,220	57,058
1979	69,912	67,470	58,806	49,647	45,378	49,109	58,064	64,168	59,251	49,430	49,480	58,437
1980	65,841	64,514	60,497	51,749	45,699	52,267	68,611	74,893	67,969	54,014	50,539	50,775
1981	72,240	64,588	56,238	49,624	47,381	54,997	68,901	69,224	60,173	51,985	50,754	--

SOURCE: Energy Information Administration, U.S. Department of Energy, Energy Data Report (Washington, D.C.: monthly, various issues).

TABLE XIX-29. SALES OF ELECTRIC ENERGY TO COMMERCIAL CONSUMERS IN MICHIGAN AND THE UNITED STATES, BY MONTH: 1970-1979

(Millions of killowatt-hours)

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Michigan						
1970	902	882	895	877	847	896	936	948	945	915	865	897
1971	934	936	943	899	877	915	1,022	982	991	976	939	957
1972	1,016	1,009	1,008	973	937	1,084	1,057	1,031	1,061	1,024	1,030	1,053
1973	1,091	1,083	1,087	1,015	1,021	1,081	1,145	1,200	1,208	1,091	1,100	1,081
1974	1,081	1,057	1,036	997	984	1,041	1,114	1,178	1,134	1,056	1,053	1,104
1975	1,161	1,033	1,075	1,044	998	1,108	1,220	1,231	1,098	1,069	1,050	1,130
1976	1,208	1,079	1,105	1,046	1,076	1,130	1,264	1,210	1,207	1,113	1,086	1,252
1977	1,313	1,124	1,167	1,087	1,142	1,203	1,282	1,303	1,188	743	1,101	1,248
1978	1,300	1,147	1,176	1,098	1,084	1,217	1,249	1,338	1,290	1,215	1,138	1,243
1979	1,370	1,206	1,269	1,165	1,179	1,253	1,293	1,352	1,223	1,227	1,178	1,271
1980	1,343	1,214	1,282	1,213	1,159	1,202	1,325	1,425	1,293	1,237	1,184	1,282
1981	1,407	1,176	1,267	1,169	1,173	1,259	1,384	1,441	1,290	1,214	1,153	--
						United States						
1970	24,129	23,753	23,420	23,238	24,111	26,126	28,086	29,051	28,929	26,703	24,339	24,776
1971	25,881	25,683	25,277	24,889	24,916	27,562	30,727	30,422	30,710	28,735	27,100	27,005
1972	27,888	27,929	27,846	27,750	27,981	33,142	32,100	33,516	33,447	30,927	29,366	29,689
1973	31,182	30,445	30,100	29,038	30,060	33,194	36,147	36,820	36,711	33,289	31,453	29,829
1974	30,608	29,542	29,310	28,986	29,876	32,800	35,229	36,414	35,830	32,112	30,968	31,757
1975	33,026	31,459	31,194	31,335	30,926	34,665	37,631	38,576	37,325	32,817	31,608	32,596
1976	34,955	33,583	32,273	31,813	32,347	35,130	39,026	39,517	38,503	34,388	33,372	35,579
1977	37,598	36,105	34,249	33,180	34,291	37,658	41,863	42,483	41,062	36,655	34,075	35,714
1978	37,942	37,286	36,201	33,484	33,896	38,624	42,839	43,694	42,935	38,354	35,864	37,650
1979	40,200	39,670	37,938	35,731	36,259	39,174	42,528	43,915	42,416	38,750	36,656	37,952
1980	39,578	39,528	38,762	36,453	36,110	40,129	45,525	47,679	46,028	40,479	37,954	39,846
1981	42,120	40,244	38,586	36,975	38,409	43,130	47,859	47,842	45,877	41,175	38,746	--

SOURCE: Energy Information Administration, U.S. Department of Energy, Energy Data Report (Washington, D.C. : monthly, various issues).

TABLE XIX-31. MICHIGAN ELECTRIC UTILITY STATISTICS: 1979 AND 1980

Company		Number of customers	Sales to ultimate consumers		Peak demand for year	Total assets[a]
			($000)	Mwh	(kw)	($000)
Privately owned utilities						
Alpena Power Company	1979	14,169	10,170	257,762	57,130	9,015
	1980	14,445	11,397	250,085	53,280	9,426
Consumers Power Company	1979	1,297,117	1,088,450	25,939,501	4,478,970[b]	4,670,780[c]
	1980	1,318,727	1,226,132	24,718,039	4,540,345[b]	5,101,637[c]
Detroit Edison Company	1979	1,741,580	1,560,249	35,327,243	6,829,000	4,550,859
	1980	1,762,308	1,670,654	32,984,275	6,703,00	4,987,424
Edison Sault Electric Co.	1979	15,240	9,411	351,410	81,612	17,856
	1980	15,345	10,267	352,833	80,619	18,328
Indiana & Michigan Electric[b]	1979	74,193	54,265	1,710,824	d	d
	1980	74,396	56,233	1,607,475	d	d
Lake Superior Dist.Pwr.[b]	1979	10,426	4,668	114,227	b	b
	1980	10,944	5,593	125,233	d	d
Michigan Power Company	1979	28,210	22,805	568,984	115,117	51,530
	1980	28,779	22,997	583,448	121,801	55,612
Upper Peninsula Power Co.	1979	58,904	31,803	641,566	140,306	60,418
	1980					
Wisconsin Elec.Power Co.[b]	1979	21,784	17,889	530,956	d	d
	1980	22,010	20,275	517,517		
Wisconsin Public Service Corporation[b]	1979	7,558	4,920	152,042	d	d
	1980	7,613	5,718	151,424		
Rural electric cooperatives						
Alger-Delta Co-op	1979	6,627	2,371	38,323	9,179	4,479
	1980	6,733	2,531	37,161	9,118	4,702
Cherryland R.E.C.	1979	14,787	6,613	113,192	24,720	9,624
	1980	15,389	7,872	117,288	26,161	10,592
Cloverland Elec. Co-op	1979	11,758	4,008	105,923	20,300	11,991
	1980	11,841	4,610	107,509	n.a.	12,898
Fruit Belt Elec. Co-op	1979	18,632	9,652	231,003	60,738	13,184
	1980	18,891	10,160	220,335	50,790	13,774
O & A Electric Co-op	1979	20,293	7,865	122,368	29,450	10,650
	1980	20,706	8,557	126,444	30,514	11,464
Oceana Electric Co-op	1979	7,600	3,009	51,162	11,670	2,699
	1980	7,841	3,259	50,650	11,696	2,820
Ontonagon County REA	1979	3,137	1,086	17,495	4,099	1,973
	1980	3,210	1,265	16,786	n.a.	2,153
Presque Isle	1979	22,193	7,906	118,302	27,787	13,928
	1980	22,533	8,469	117,504	28,340	14,483
Southeastern Mich. REA	1979	3,500	1,954	35,242	8,308	3,212
	1980	3,544	2,234	34,885	n.a.	3,345
Thumb Electric Co-op	1979	8,916	5,000	84,226	21,747	9,431
	1980	9,056	5,493	83,914	19,930	9,673
Top O'Michigan REA	1979	31,243	13,044	207,689	49,813	22,636
	1980	31,816	14,259	212,655	n.a.	23,527
Tri-county Electric Co-op	1979	15,315	8,037	131,867	29,590	8,361
	1980	15,603	8,616	132,270	30,860	8,974
Western Mich. Electric Co-op	1979	9,073	2,701	38,732	10,794	4,124
	1980	9,204	2,861	39,544	11,409	4,337

SOURCE: Michigan Public Service Commission, special release.

a. Net utility plant.
b. Main system only. Does not include Pontiac systems.
c. Includes assets in natural gas system.
d. These utilities operate in more than one state, and the peak demand and total assets for Michigan are not given.

TABLE XIX-32. NUMBER OF NATURAL GAS DISTRIBUTION UTILITY CUSTOMERS IN MICHIGAN, BY CLASS OF SERVICE: 1962-1979

(In thousands)

Year	Residential	Commercial	Industrial	Other	Total
1962	1,449.5	119.4	7.3	(L)	1,542.0
1963	1,486.3	123.2	7.4	(L)	1,616.9
1964	1,535.2	128.6	7.8	(L)	1,671.6
1965	1,590.5	134.2	8.2	(L)	1,732.9
1966	1,653.3	139.5	8.8	(L)	1,801.6
1967	1,707.1	143.9	9.3	(L)	1,860.3
1968	1,758.1	148.6	9.7	(L)	1,916.4
1969	1,810.3	153.7	9.9	(L)	1,973.9
1970	1,850.9	157.2	10.4	(L)	2,018.5
1971	1,907.0	161.5	10.0	(L)	2,079.2
1972	1,946.7	168.7	10.6	(L)	2,126.0
1973	1,984.4	174.6	10.9	(L)	2,169.9
1974	2,023.3	178.1	10.8	(L)	2,212.2
1975	2,048.7	175.4	10.4	(L)	2,234.5
1976	2,069.7	165.3	9.4	(L)	2,244 4
1977	2,100.7	159.3	9.0	(L)	2,269.1
1978	2,145.1	159.4	9.2	(L)	2,313.6
1979	2,206.3	158.0	9.4	(L)	2,373.7

SOURCE: American Gas Association, Gas Facts, 1961 through 1979 (Arlington, Va.: annually), Table 60 (1979).

(L): Less than 50 customers.

TABLE XIX-33. TOTAL GAS REVENUES OF NATURAL GAS DISTRIBUTION UTILITIES IN MICHIGAN, BY CLASS OF SERVICE: 1962-1979

(In millions of dollars)

Year	Residential	Commercial	Industrial	Other	Total
1962	232	55	71	1	359
1963	242	60	76	(L)	377
1964	250	64	86	(L)	399
1965	267	71	96	(L)	434
1966	281	79	112	(L)	480
1967	298	88	119	(L)	505
1968	308	94	128	(L)	531
1969	328	104	156	3	591
1970	350	115	178	8	651
1971	362	129	205	7	703
1972	404	158	231	6	799
1973	394	169	245	5	813
1974	480	228	327	8	1,044
1975	550	303	404	12	1,269
1976	690	401	519	2	1,612
1977	784	423	530	8	1,746
1978	869	448	633	8	1,950
1979	1,023	488	725	15	2,236

SOURCE: American Gas Association, Gas Facts, 1961 through 1979 (Arlington, Va.: annually), Table 82 (1979).

(L): Less than $500,000.

TABLE XIX-34. VOLUME OF NATURAL GAS SALES FOR CONSUMPTION BY MICHIGAN UTILITIES: 1979 AND 1980

(Millions of cubic feet)

Utility		Residential		Commercial		Industrial total
		Nonheat	Heat	Nonheat	Heat	
Battle Creek Gas Company	1979	136,283	3,776,973	138,258	1,940,565	4,491,452
	1980	113,80	3,771,389	122,194	1,989,147	6,288,666
Citizens Gas Fuel Company	1979	38,668	1,275,948	40,170	613,159	1,230,264
	1980	31,097	1,249,898	27,388	573,672	1,026,788
Consumers Power Company	1979	2,152,654	166,757,032	3,246,184	59,803,965	81,100,619
	1980	2,012,862	169,914,810	3,798,933	61,582,733	81,147,290
Lake Superior District Power	1979	2,171	416,428	95,695	241,358	124,400
	1980	6,560	448,963	96,585	235,760	137,094
Michigan Consolidated Gas Company	1979	3,009,338	176,026,561	6,018,945	98,820,254	158,513,639
	1980	2,831,738	172,832,541	6,063,341	95,551,166	115,198,311
Michigan Gas Utilities Co.	1979	168,903	13,769,044	202,315	5,686,602	15,791,774
	1980	146,861	13,752,360	206,757	5,846,693	14,725,210
Michigan Power Company	1979	50,666	8,309,131	114,734	5,309,711	10,039,639
	1980	41,819	8,259,369	106,363	5,081,223	9,407,664
Peninsular Gas Company	1979	5,672	424,124	2,259	244,973	14,646
	1980	6,140	383,955	1,940	223,846	13,738
Southeastern Mich. Gas Company	1979	54,893	8,652,039	121,516	4,014,550	2,518,905
	1980	39,882	8,810,227	127,727	3,873,205	2,576,010
Wisconsin Public Service Co.	1979	119,466	5,645,639	113,081	883,260	5,322,391
	1980	124,632	5,442,875	147,012	888,370	3,968,432
TOTAL	1979	5,738,714	385,054,919	10,093,157	177,558,417	279,147,729
	1980	5,354,971	384,866,387	10,698,240	175,845,815	234,489,203

SOURCE: Michigan Public Service Commission, special release.

TABLE XIX-35. NUMBER OF NATURAL GAS CUSTOMERS OF MICHIGAN UTILITIES: 1979 AND 1980 AVERAGES

Utility		Residential		Commercial		Industrial total
		Nonheat	Heat	Nonheat	Heat	
Battle Creek Gas Company	1979	3,723	23,330	244	1,872	41
	1980	2,869	24,961	241	1,908	41
Citizens Gas Fuel Company	1979	972	7,319	63	735	27
	1980	781	7,905	49	767	29
Consumers Power Company	1979	51,981	946,227	1,839	62,748	6,923
	1980	41,750	997,319	1,877	66,849	7,125
Lake Superior District Power	1979	59	2,770	35	356	8
	1980	114	3,088	31	391	8
Mich. Consolidated Gas Company	1979	58,458	904,944	5,881	64,311	1,175
	1980	53,103	921,904	5,692	65,067	1,193
Michigan Gas Utilities Co.	1979	4,224	84,630	421	7,692	608
	1980	3,478	89,746	404	8,005	610
Michigan Power Company	1979	1,402	54,405	248	6,159	417
	1980	1,050	57,751	240	6,430	412
Peninsular Gas Company	1979	281	2,326	17	246	1
	1980	270	2,317	15	243	1
Southeastern Mich. Gas Company	1979	1,568	53,580	170	4,612	90
	1980	1,161	56,434	144	4,865	93
Wisconsin Public Service Co.	1979	441	3,624	30	254	85
	1980	361	3,815	21	271	78
TOTAL	1979	123,109	2,083,155	8,948	148,985	9,375
	1980	104,937	2,165,240	8,714	154,796	9,590

SOURCE: Michigan Public Service Commission, special release.

The first postwar business census covered the year 1948, and subsequent censuses have been taken twice each decade. The current law authorizes the U.S. Bureau of the Census to canvass the nation's industrial and business establishements at five-year intervals in years ending in 2 and 7. These economic censuses cover construction industries, manufacturing, mining, retail trade, selected services, selected transportation, and wholesale trade.

Each establishment is classified on the basis of its major economic activity: selling merchandise to retailers; to industrial, commercial, institutional, farm or professional users; and to other wholesalers; or acting as agents or brokers in buying merchandise for or selling merchandise to persons or companies classified as wholesalers. Also included are wholesale liquor establishments operated by state or local governments. The basic tabulations in this chapter do not include data for central administrative offices, captive warehouses, and other units that service or are auxiliary to wholesale establishments within the same organization.

The 1977 Census of Wholesale Trade covers all such establishments that have a payroll. Firms with payrolls were sent questionnaires for each establishment operated.

Sales reported in the Census of Wholesale Trade do not include wholesale sales incidental to other kinds of business, such as retailing or services. They do include total receipts, including accruals, of wholesale establishments, even though some of these receipts were from servicing merchandise, carrying charges, delivering merchandise, retailing to households, and so forth. Refunds and allowances for merchandise returned are deducted. Sales and excise taxes are included, but nonoperating income (rental of real estate, interest or dividends on investments, and so forth) is not. Sales figures include sales so defined of all establishments in business at any time during the year, whereas the number of establishments in the Census of Retail Trade excludes those that have gone out of business during the year.

Payroll is as defined by the Internal Revenue Service. It includes wages and salaries, gratuities reported to the employer, commissions, bonuses, vacation and sick leave pay before deducting employee income taxes, Social Security taxes, union dues, and so forth.

Employment for the pay period including 12 March 1977 consists of paid employees of corporations and unincorporated businesses, including salaried officers and executives of corporations, but excluding proprietors and partners of unincorporated businesses. Employees on paid sick leave or holiday or on paid vacation also are included.

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TABLE XX-1. AVERAGE WAGE AND SALARY EMPLOYMENT AND WEEKLY HOURS AND EARNINGS OF SALES WORKERS IN MICHIGAN AND THE UNITED STATES WHOLESALE TRADE ESTABLISHMENTS: 1956-1980

	Michigan				United States			
	Employment	Weekly[a]		Hourly	Employment	Weekly		Hourly
Year	(000)	Hours	Earnings	earnings[a]	(000)	Hours	Earnings	earnings
1956	103.5	40.3	85.72	2.13	3,018	40.5	78.57	1.94
1957	101.9	40.6	88.18	2.17	3,028	40.3	81.41	2.02
1958	103.2	40.9	87.57	2.14	2,980	40.2	84.02	2.09
1959	99.9	40.5	97.16	2.40	3,082	40.6	88.51	2.18
1960	102.9	40.4	99.59	2.47	3,143	40.5	90.72	2.24
1961	101.7	40.7	102.56	2.52	3,133	40.5	93.56	2.31
1962	104.7	40.8	104.33	2.56	3,198	40.6	96.22	2.37
1963	105.9	41.7	109.34	2.62	3,248	40.6	99.47	2.45
1964	111.3	43.3	118.70	2.74	3,337	40.7	102.56	2.52
1965	119.8	43.3	127.43	2.94	3,466	40.8	106.49	2.61
1966	127.9	43.7	136.56	3.13	3,597	40.7	111.11	2.73
1967	133.1	45.8	147.29	3.22	3,689	40.3	116.06	2.88
1968	135.8	41.0	133.91	3.27	3,779	40.1	122.31	3.05
1969	137.4	40.6	155.01	3.82	3,907	40.2	129.85	3.23
1970	144.8	40.2	165.06	4.11	3,993	39.9	137.26	3.44
1971	144.8	39.7	173.73	4.38	4,001	39.5	144.18	3.65
1972	146.0	39.7	184.18	4.63	4,113	39.4	151.69	3.85
1973	150.6	40.1	197.13	4.92	4,277	39.3	160.34	4.08
1974	153.5	39.8	211.48	5.31	4,433	38.8	170.33	4.39
1975	146.9	41.2	253.63	6.16	4,415	38.7	183.05	4.73
1976	148.8	39.2	244.81	6.25	4,546	38.7	194.66	5.03
1977	151.8	39.1	257.55	6.59	4,708	38.8	209.13	5.39
1978	164.2	39.6	292.41	7.38	4,969	38.8	228.14	5.88
1979	170.4	38.6	304.13	7.88	5,204	38.8	247.93	6.39
1980	161.0	38.9	324.89	8.35	5,281	38.5	267.96	6.96

SOURCE: Michigan Employment Security Commission Special release, and Bureau of Labor Statistics, Employment and Earnings, (Washington, D.C.: Monthly), April 1981, Tables B-1 and B-20.

a. Durable goods wholesalers only.

TABLE XX-2. COMPARATIVE MICHIGAN WHOLESALE TRADE STATISTICS: 1972-1977

Kind of business	Michigan sales as a percentage of U.S. sales		Percentage increase in sales 1972-1977	
	1972	1977	Michigan	U.S.
Automotive parts & supplies	8.7	11.3	106.7	58.6
Metals service centers & offices	8.8	8.7	71.5	73.2
Scrap & waste materials	5.7	6.3	91.0	71.5
Paints, varnishes & supplies	8.6	6.2	27.8	76.9
Industrial supplies	6.5	5.7	54.2	75.6
Industrial machinery & equipment	5.2	5.2	135.9	135.4
Beer & ale	5.1	5.0	65.1	67.6
Automobiles & other motor vehicles	5.0	4.9	81.8	86.6
Tobacco & tobacco products	4.0	4.6	68.9	46.6
Warm air htg. & air cond. eqpt. & supplies	4.6	4.5	57.1	59.4
Dairy products	2.8	4.4	170.1	69.1
Wines & distilled alcoholic beverages	4.2	4.2	16.9	17.8
Construction materials, N.E.C.	6.8	4.0	- 6.6	58.1
Meat & meat products	3.1	4.0	74.2	36.4
Electrical appliances, TV & radio sets	3.3	3.8	63.5	41.4
Groceries, general-line	5.6	3.8	29.5	90.2
Hardware	4.1	3.7	37.7	53.9
Sporting & recreational goods & supplies	3.8	3.6	56.4	63.4
Chemicals & allied products	3.1	3.6	141.5	109.8
Coal & other minerals & ores	3.1	3.5	288.6	238.6
Commercial machines & equipment	4.3	3.5	73.7	115.8
Petroleum bulk stations & terminals	3.2	3.5	132.1	115.3
Toys & hobby goods & supplies	2.8	3.3	99.2	64.5
Professional equipment & supplies	3.6	3.3	78.3	92.1
Durable goods, N.E.C.	2.3	3.3	170.7	91.1
Furniture	3.0	3.3	73.3	59.7
Service establishment equipment & supplies	3.5	3.3	40.5	50.9
Plumbing, htg. eqpt. & supplies (hydronics)	3.7	3.2	54.6	78.0
Electrical apparatus & equipment	3.7	3.2	11.1	28.5
Home furnishings	3.0	3.2	102.2	86.9
Poultry & poultry products	4.9	3.1	14.8	78.0
Fresh fruits & vegetables	3.3	3.1	43.6	52.8
Lumber, plywood & millwork	3.6	2.9	36.0	69.0
Refrigeration equipment & supplies	2.2	2.8	93.1	54.8
Groceries & related products, N.E.C.	3.3	2.8	45.7	73.7
Printing & writing paper	2.7	2.7	108.3	106.4
Stationery supplies	3.4	2.7	41.3	81.2
Electronic parts & equipment	2.2	2.5	117.0	88.3
Farm & garden machinery & equipment	2.9	2.4	58.5	92.5
Drugs, drug proprietaries & druggists supplies	2.7	2.3	34.9	53.5
Nondurable goods, N.E.C.	2.1	2.3	28.1	19.0
Tires & tubes	4.9	2.1	-38.3	44.7
Fish & seafood	2.4	2.1	103.7	131.5
Construction & mining machinery & equipment	2.7	2.0	63.3	120.6
Confectionary	2.4	2.0	79.4	119.4
Frozen foods	1.4	1.9	158.0	92.7
Industrial & personal service paper	1.8	1.9	91.1	79.6

TABLE XIX-30. SALES OF ELECTRIC ENERGY TO ALL CONSUMERS IN MICHIGAN AND THE UNITED STATES, BY MONTH: 1970-1979

(Millions of killowatt-hours)

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Michigan						
1970	4,764	4,699	4,639	4,638	4,543	4,581	4,656	4,835	4,727	4,359	4,228	4,644
1971	4,995	5,139	4,964	4,819	4,737	4,800	4,871	4,971	5,041	5,043	4,901	4,962
1972	5,222	5,468	5,279	5,236	5,075	5,575	5,157	5,332	5,446	5,405	5,484	5,528
1973	5,736	5,879	5,681	5,580	5,456	5,560	5,839	5,910	6,152	5,708	5,687	5,530
1974	5,610	5,521	5,308	5,290	5,216	5,379	5,541	5,833	5,747	5,578	5,479	5,364
1975	5,613	5,152	5,188	5,189	4,914	5,145	5,521	5,780	5,550	5,432	5,291	5,634
1976	6,072	5,643	5,799	5,563	5,509	5,761	5,993	5,954	5,881	5,614	5,733	6,227
1977	6,400	5,892	5,992	5,647	5,780	5,955	6,089	6,352	6,040	4,799	5,791	6,224
1978	6,492	5,903	5,983	5,892	5,771	6,052	6,084	6,393	6,364	6,293	6,024	6,252
1979	6,878	6,266	6,490	5,904	6,019	6,156	6,181	6,267	5,974	5,856	5,752	5,898
1980	6,278	5,886	6,079	5,737	5,165	5,156	5,719	6,105	5,900	5,860	5,714	6,082
1981	6,296	5,718	5,953	5,601	5,566	5,806	6,207	6,273	5,736	5,524	5,369	--
						United States						
1970	117,190	113,488	111,980	109,023	109,074	114,474	122,584	127,134	127,067	117,946	110,124	115,434
1971	122,224	120,439	118,956	115,212	112,985	120,447	131,366	130,424	131,569	124,180	119,054	122,450
1972	128,766	128,210	127,366	123,946	123,389	140,347	136,851	144,504	144,452	135,712	130,690	135,012
1973	144,505	139,546	137,102	131,366	131,361	140,293	152,562	157,481	157,310	146,042	138,142	137,199
1974	144,203	137,060	136,157	133,387	133,162	142,113	151,528	157,844	154,431	141,135	136,071	140,978
1975	148,097	141,550	139,237	135,481	132,174	141,657	152,771	159,444	156,284	140,400	137,861	146,149
1976	158,903	151,949	145,839	140,728	140,123	147,550	161,224	166,792	162,750	148,778	148,758	160,798
1977	170,685	163,738	154,560	146,297	146,890	157,741	173,384	176,896	170,619	157,673	149,754	160,606
1978	174,372	168,291	161,950	148,883	149,914	163,981	177,607	182,666	181,015	166,722	159,125	168,709
1979	184,757	180,179	171,515	159,743	157,688	165,256	176,495	185,519	178,220	165,721	162,096	169,815
1980	179,585	178,720	174,373	161,703	154,851	164,872	185,882	196,205	190,139	170,078	162,174	175,607
1981	188,277	178,613	169,789	160,688	160,642	175,979	195,008	195,640	183,620	168,679	162,129	--

SOURCE: Energy Information Administration, U.S. Department of Energy, Energy Data Report (Washington, D.C.: monthly, various issues).

TABLE XX-2. COMPARATIVE MICHIGAN WHOLESALE TRADE STATISTICS: 1972-1977 (cont.)

Kind of business	Michigan sales as a percentage of U.S. sales		Percentage increase in sales 1972-1977	
	1972	1977	Michigan	U.S.
Petroleum & petroleum products except bulk stations & terminals	2.1	1.5	145.1	247.8
Farm supplies	1.9	1.4	46.4	94.5
Livestock	1.2	1.4	26.0	13.0
Footwear	n.a.	1.1	n.a.	81.5
Photographic equipment & supplies	1.7	1.0	-25.5	27.9
Grain	1.1	0.8	108.9	187.9
Notions & other dry goods	n.a.	0.8	n.a.	-19.7
Men's & boy's clothing & furnishings	0.7	0.8	69.7	61.4
Jewelry, watches, diamonds & other precious stones	1.3	0.7	65.2	191.7
Transportation eqpt. & supplies except motor vehicles	1.3	0.6	4.3	122.6
Piece goods (woven fabrics)	0.6	0.6	52.5	41.7
Women's, children's & infants clothing & accessories	0.4	0.6	122.3	43.3
Farm-product raw materials, N.E.C.	n.a.	0.4	n.a.	65.5
Total wholesale trade	3.8	3.6	20.8	81.0

SOURCE: Developed from Bureau of the Census, 1977 Census of Wholesale Trade, Geographic Area Series, Michigan (Washington, D.C.: 1980), WC77-A-23, Tables 1 and 2; a similar document for 1972; and similar documents for the United States.

n.a.: not available.

TABLE XX-3. SUMMARY STATISTICS FOR WHOLESALE TRADE ESTABLISHMENTS IN MICHIGAN AND THE UNITED STATES: 1947, 1954, 1958, 1963, 1967, 1972, AND 1977

	Establishments with payroll							
	Number[a] (000)		Sales ($1,000,000)		Annual payroll ($1,000,000)		Paid employees[b] (000)	
Year	Mich.	U.S.	Mich.	U.S.	Mich.	U.S.	Mich.	U.S.
1947[c]	8,485	243,366	6,721	188,689	319	7,991	88,725	2,382,789
1947	7,600	216,099	n.a.	n.a.	298	7,734	83,138	2,305,403
1954	9,441	250,322	10,087	233,976	479	10,868	99,793	2,590,361
1958	10,797	285,996	11,600	284,971	547	13,199	105,273	2,797,341
1963	11,635	308,177	14,055	358,386	711	18,101	113,845	3,088,706
1967	11,436	311,464	18,800	459,476	976	23,922	131,751	3,518,969
1972[d]	12,208	348,168	26,238	683,659	1,369	35,887	133,359	3,878,181
1972[e]	12,827	369,791	26,546	695,224	1,397	36,893	137,037	4,026,118
1977[e]	12,572	382,837	45,152	1,258,400	2,109	58,290	141,484	4,397,089

SOURCE: Bureau of the Census, *1977 Census of Wholesale Trade, Geographic Area Statistics, Advance Report* (Washington, D.C.: 1980), WC77-A-23(A), Table 1; *U.S. Census of Wholesale Trade, 1972, Area Series, Michigan* (Washington, D.C.: 1974), WC72-A-23, Table I and 5; and Bureau of the Census, *U.S. Census of Business, 1967, Wholesale Trade, Michigan* (Washington, D.C.: 1969), BC67-WA24, Table 2, and similar census documents for 1963 (BC63-WA24, Table 2), 1958 (BC58-WA22, Table 101), 1954 (W-1-22, Tables 101 and 105), and 1947 (vol. 5, Michigan section, Table 101), and similar documents for the U.S.

a. Excludes establishements with no paid employment.
b. Week including 15 November for 1947-1963; week including 12 March for 1967 and 1972.
c. Unrevised statistics. Based upon reports from establishments with sales volume of $5,000 or over.
d. Based on 1967 Standard Industrial Classification.
e. Based on 1972 Standard Industrial Classification.

TABLE XX-4. RANKING OF STATES ACCORDING TO PERCENTAGE CHANGE IN SALES BY WHOLESALE TRADE ESTABLISHMENTS: 1972-1977

State	Change	State	Change	State	Change
Wyoming	170.4	Indiana	89.6	New Jersey	73.7
Alaska	158.7	Montana	88.7	North Carolina	72.9
Connecticut	117.9	Alabama	88.2	South Dakota	72.9
Kansas	112.6	West Virginia	87.6	Florida	72.0
Texas	107.8	Virginia	85.9	Michigan	70.1
Delaware	107.6	Arizona	84.3	Missouri	69.4
Iowa	101.4	Illinois	83.8	Nebraska	66.6
Louisiana	99.6	Idaho	83.7	Pennsylvania	65.9
Washington	98.4	Utah	83.3	Maryland	65.5
Oklahoma	97.1	Ohio	83.2	New York	64.7
Tennessee	96.9	Wisconsin	81.3	Hawaii	64.7
Arkansas	96.9	California	81.2	Massachusetts	56.6
Oregon	94.7	New Mexico	79.1	Vermont	54.7
Colorado	94.5	Georgia	77.9	Maine	50.1
Minnesota	93.2	Mississippi	77.0	Rhode Island	48.4
Kentucky	92.1	South Carolina	76.0	New Hampshire	40.1
Nevada	90.6	North Dakota	75.0	District of Columbia	24.4

SOURCE: Developed from Bureau of the Census, U.S. Census of Wholesale Trade Industries, 1977, U.S. Summary (Washington, D.C.: 1980), WH77-A-10, Table 4.

TABLE XX-5. RANKING OF STATES ACCORDING TO SALES PER WHOLESALE TRADE ESTABLISHMENT: 1977

(In thousands of dollars)

State	1977	State	1977	State	1977
Delaware	6,695	Kansas	3,264	Wyoming	2,207
Illinois	4,571	Pennsylvania	3,062	Rhode Island	2,078
New York	4,336	Virginia	3,052	South Carolina	2,010
New Jersey	4,256	Louisiana	2,877	Mississippi	1,943
Connecticut	4,097	North Carolina	2,874	West Virginia	1,894
Tennessee	3,953	Indiana	2,866	Arkansas	1,847
Ohio	3,707	Colorado	2,861	North Dakota	1,829
Oregon	3,687	Washington	2,799	South Dakota	1,793
		Kentucky	2,627	Maine	1,791
District of Columbia	3,627	Iowa	2,626	Nevada	1,756
Michigan	3,591	Nebraska	2,557	New Hampshire	1,655
Missouri	3,505	Wisconsin	2,495	Hawaii	1,638
California	3,504	Alabama	2,483	Montana	1,635
Georgia	3,491	Oklahoma	2,445	Idaho	1,568
Minnesota	3,373	Alaska	2,407	Vermont	1,389
Maryland	3,367	Utah	2,330	New Mexico	1,378
Texas	3,325	Arizona	2,255		
Masachusetts	3,320	Florida	2,231		

SOURCE: Developed from Bureau of the Census, U.S. Census of Wholesale Trade Industries, 1977, U.S. Summary (Washington, D.C.: 1980), WH77-A-10, Table 4.

TABLE XX-6. GENERAL STATISTICS FOR WHOLESALE TRADE ESTABLISHMENTS IN MICHIGAN, BY TYPE OF OPERATION: 1972 AND 1977

Type of operation	Year	Number of establishments[a]	Sales ($1,000)	Annual payroll ($1,000)	Payroll first quarter ($1,000)	Paid employees 12 March
Merchant wholesalers						
Wholesale merch. & dist.	1972	9,432	11,389,979	947,595	223,400	98,150
	1977	9,366	17,537,764	1,427,456	332,317	102,091
Grain elevators (terminals, and country	1972	160	231,363	10,195	2,286	1,266
	1977	148	475,527	17,628	3,785	1,452
Importers	1972	99	196,250	10,665	2,564	935
	1977	157	650,879	28,817	6,939	1,951
Exporters	1972	18	10,226	1,062	265	142
	1977	29	95,387	2,449	538	179
TOTAL	1972	9,709	11,827,818	969,517	228,515	100,493
	1977	9,813	19,279,693	1,490,858	347,208	107,214
Manufacturers' sales branches and offices						
Mfg. sales branches, with stock	1972	1,131	4,535,901	234,711	56,512	20,973
	1977	772	7,822,860	340,886	81,072	19,616
Mfg. sales offices, without stock	1972	621	7,231,666	106,801	26,554	8,261
	1977	561	12,607,442	142,927	35,379	7,042
TOTAL	1972	1,752	11,767,567	341,512	83,066	29,234
	1977	1,333	20,430,302	483,813	116,451	26,658
Merchandise agents and brokers						
Merchandise brokers for buyers or sellers	1972	162	657,663	13,414	3,200	1,120
	1977	129	795,116	15,655	3,826	1,038
Commission merchants	1972	201	377,110	9,630	2,256	969
	1977	208	605,759	15,596	3,486	978
Manufacturers' agents	1972	901	1,596,099	57,293	13,277	4,270
	1977	1,039	3,680,751	99,519	23,212	4,916
Other agents & brokers	1972	102	319,514	6,128	1,483	951
	1977	50	359,898	3,479	787	680
TOTAL	1972	1,366	2,950,386	86,465	20,216	7,310
	1977	1,426	5,441,524	134,249	31,311	7,612
GRAND TOTAL	1972	12,827	26,545,771	1,397,494	331,797	137,037
	1977	12,572	45,151,519	2,106,920	494,970	141,484

SOURCE: Bureau of the Census, U.S. Census of Wholesale Trade, 1977, Area Series, Michigan (Washington, D.C.: 1980), WC72-A-23, Table I; and a similar document for 1972.

a. Excludes establishments with no paid employment.

TABLE XX-7. DETAILED STATISTICS FOR WHOLESALE ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977

Type of operation	Year	Number of establishments[a]	Sales ($1,000)	Annual payroll ($1,000)	Payroll first quarter ($1,000)	Paid employees 12 March
		Durable goods				
Motor vehicles and automotive parts and supplies	1972	1,433	4,884,133	165,307	39,686	16,403
	1977	1,523	8,998,004	269,239	64,253	17,798
Automobiles & other motor vehicles	1972	216	2,897,917	37,646	9,140	3,494
	1977	220	5,268,222	60,091	14,567	2,569
Automotive parts & supplies	1972	1,111	1,727,503	115,722	27,620	11,647
	1977	1,197	3,570,220	195,138	46,752	13,356
Tires and tubes	1972	106	258,713	11,939	2,926	1,262
	1977	106	159,562	14,010	2,934	873
Furniture & home furnishings	1972	298	368,134	29,300	6,776	2,841
	1977	328	709,908	42,862	9,838	3,062
Furniture	1972	154	119,075	12,700	2,985	1,162
	1977	159	206,345	16,301	3,838	1,207
Home furnishings	1972	144	249,059	16,600	3,791	1,679
	1977	169	503,583	26,561	5,499	1,855
Lumber & other construction materials	1972	637	1,385,003	73,695	16,934	6,644
	1977	594	1,539,060	87,570	19,254	5,403
Lumber, plywood, & millwork	1972	286	575,801	36,177	8,278	3,331
	1977	249	783,185	43,513	9,939	2,758
Construction materials, N.E.C.	1972	351	809,202	37,518	8,656	3,313
	1977	345	755,875	44,057	9,315	2,645
Sporting, recreational, photographic, and hobby goods, toys, & supplies	1972	242	301,986	32,639	7,740	3,343
	1977	212	426,087	32,166	7,513	2,290
Sporting & recreational goods and supplies	1972	142	166,249	16,962	3,875	1,917
	1977	117	260,075	17,800	4,052	1,300

TABLE XX-7. DETAILED STATISTICS FOR WHOLESALE ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

Type of operation	Year	Number of establishments[a]	Sales ($1,000)	Annual payroll ($1,000)	Payroll first quarter ($1,000)	Paid employees 12 March
		Durable goods (cont.)				
Hobby goods, toys, & supplies	1972	36	52,095	4,497	1,059	495
	1977	55	103,758	7,205	1,747	550
Photographic equip. & supplies	1972	64	83,642	11,180	2,806	931
	1977	40	62,254	7,161	1,714	440
Metals & minerals, except petroleum	1972	448	3,651,329	83,264	20,337	6,961
	1977	515	6,463,559	132,170	30,195	7,456
Metals service centers and offices	1972	427	3,559,313	81,459	19,943	6,849
	1977	487	6,105,989	127,864	29,297	7,253
Coal & other minerals & ores	1972	21	92,016	1,805	394	112
	1977	28	357,570	4,306	898	205
Electrical goods	1972	713	1,657,664	85,235	20,599	8,016
	1977	763	2,252,456	124,987	29,775	8,458
Electrical apparatus & equipment, wiring supplies, & construction materials	1972	386	1,059,653	49,445	12,089	4,631
	1977	439	1,177,600	70,288	16,894	4,597
Electrical appliances & TV & radio sets	1972	115	416,456	22,272	5,187	1,915
	1977	99	680,878	29,249	6,853	2,028
Electronic Parts & equipment	1972	212	181,555	13,518	3,323	1,470
	1977	225	393,978	25,450	6,028	1,833
Hardware, plumbing, heating equipment, supplies	1972	685	734,250	68,422	16,671	6,470
	1977	686	1,101,409	93,127	22,436	6,375
Hardware	1972	195	272,846	22,547	5,547	2,214
	1977	207	375,782	31,126	7,618	2,277
Plumbing, heating equipment & supplies (hydronics)	1972	287	273,185	27,037	6,570	2,542
	1977	286	422,440	35,518	8,676	2,430

TABLE XX-7. DETAILED STATISTICS FOR WHOLESALE ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

Type of operation	Year	Number of establishments[a]	Sales ($1,000)	Annual payroll ($1,000)	Payroll first quarter ($1,000)	Paid employees 12 March
		Durable goods (cont.)				
Scrap & waste materials	1972	370	343,542	33,109	7,914	3,824
	1977	344	656,261	53,682	12,442	4,160
Jewelry, watches, diamonds, and other precious stones	1972	62	42,478	4,046	974	457
	1977	65	70,170	6,649	1,396	544
Durable goods, N.E.C.	1972	135	134,462	14,384	2,604	1,136
	1977	164	263,929	23,416	4,019	1,485
TOTAL DURABLE GOODS	1972	7,876	16,993,604	924,163	219,579	86,485
	1977	8,276	28,850,973	1,432,046	335,367	92,199
		Nondurable goods				
Paper & paper products	1972	340	418,785	41,309	9,691	4,111
	1977	379	757,167	62,460	14,714	4,338
Printing & writing paper	1972	48	141,573	11,709	2,709	1,055
	1977	39	294,955	19,576	4,529	1,132
Stationery supplies	1972	185	135,753	17,139	3,991	1,832
	1977	240	191,872	25,993	6,031	2,033
Industrial & personal service paper	1972	107	141,459	12,461	2,991	1,224
	1977	100	270,340	17,391	4,154	1,173
Drugs, drug proprietaries, druggists' sundries	1972	110	337,672	19,349	4,552	2,023
	1977	94	455,458	20,818	4,950	1,676
Apparel, piece goods, and notions	1972	127	219,121	13,918	3,465	1,229
	1977	146	273,729	18,053	4,469	1,306
Piece goods	1972	30	70,820	4,013	1,005	363
	1977	42	108,027	5,138	1,222	304

TABLE XX-7. DETAILED STATISTICS FOR WHOLESALE ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

Type of operation	Year	Number of establishments[a]	Sales ($1,000)	Annual payroll ($1,000)	Payroll first quarter ($1,000)	Paid employees 12 March
		Durable goods (cont.)				
Warm air heating & air-conditioning equipment & supplies	1972	168	167,525	16,316	3,903	1,487
	1977	153	263,237	21,229	4,830	1,340
Refrigeration equipment and supplies	1972	35	20,694	2,522	651	227
	1977	40	39,950	5,254	1,312	328
Machinery, equipment & supplies	1972	2,853	3,490,623	334,762	79,344	30,390
	1977	3,082	6,270,130	566,178	134,266	35,168
Commercial machines & equip.	1972	367	544,343	84,348	19,846	6,743
	1977	466	945,647	154,416	37,084	8,810
Cons. & mining machinery and equipment	1972	129	213,033	24,071	5,792	1,897
	1977	151	347,968	36,098	8,700	2,178
Farm & garden equipment	1972	479	365,731	28,866	6,585	3,440
	1977	454	579,517	43,419	10,328	3,655
Industrial equipment	1972	768	893,066	77,421	18,436	6,738
	1977	879	2,106,440	154,040	36,030	8,562
Industrial supplies	1972	596	1,072,944	74,079	17,568	6,574
	1977	566	1,654,862	104,387	24,772	6,462
Professional equipment & supplies	1972	237	241,467	28,172	6,756	2,937
	1977	304	430,648	48,211	11,492	3,419
Service estab. equip. & supp.	1972	238	105,401	14,514	3,601	1,718
	1977	228	148,049	21,674	4,993	1,780
Trans. equip. & supplies except motor vehicles	1972	39	54,638	3,291	760	343
	1977	34	56,999	3,933	867	302
Misc. durable goods	1972	567	520,482	51,539	11,492	5,417
	1977	573	1,090,360	83,747	17,857	6,187

TABLE XX-7. DETAILED STATISTICS FOR WHOLESALE ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

Type of operation	Year	Number of establishments[a]	Sales ($1,000)	Annual payroll ($1,000)	Payroll first quarter ($1,000)	Paid employees 12 March
		Nondurable goods				
Notions & other dry goods	1972	12	(D)	(D)	(D)	(D)
	1977	15	15,321	1,022	284	113
Men's & boys' clothing and furnishings	1972	45	32,925	2,910	672	319
	1977	40	55,873	3,027	706	247
Women's. children's, & infants clothing & accessories	1972	34	23,523	2,336	627	261
	1977	36	52,293	5,349	1,389	399
Footwear	1972	6	(D)	(D)	(D)	(D)
	1977	13	42,215	3,337	868	243
Groceries & related pro.	1972	1,248	3,815,488	171,510	40,727	17,634
	1977	1,172	5,923,574	242,140	57,065	17,550
Croceries, general line	1972	84	1,199,942	51,286	12,065	4,453
	1977	103	1,553,326	65,387	15,178	4,229
Frozen foods	1972	53	95,191	4,836	1,076	569
	1977	77	245,634	9,881	2,397	728
Dairy products	1972	135	246,754	13,195	3,057	1,456
	1977	124	666,378	16,890	3,988	1,280
Poultry & poultry products	1972	72	181,077	7,231	1,724	888
	1977	49	207,925	9,680	2,214	781
Confectionery	1972	78	66,932	3,537	831	446
	1977	75	120,103	5,829	1,394	523
Fish & seafoods	1972	33	38,975	2,618	546	275
	1977	38	79,388	5,341	1,247	408
Meat & meat products	1972	221	570,681	27,636	6,715	2,851
	1977	202	993,955	46,731	11,305	3,242
Fresh fruits & vegetables	1972	227	315,551	17,006	4,076	2,213
	1977	189	453,060	22,274	5,318	1,941
Groceries & related products, N.E.C.	1972	345	1,100,385	44,165	10,637	4,483
	1977	315	1,603,805	60,127	14,024	4,418

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TABLE XX-7. DETAILED STATISTICS FOR WHOLESALE ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

Type of operation	Year	Number of establishments[a]	Sales ($1,000)	Annual payroll ($1,000)	Payroll first quarter ($1,000)	Paid employees 12 March
		Nondurable goods				
Farm product raw materials	1972	259	535,340	14,425	3,266	2,168
	1977	268	924,261	26,360	5,839	2,545
Cotton	1972	1	(D)	(D)	(D)	(D)
	1977	(D)	(D)	(D)	(D)	(D)
Grain	1972	196	288,498	11,917	2,676	1,485
	1977	207	602,529	21,218	4,809	1,786
LIvestock	1972	42	229,073	1,764	410	572
	1977	40	288,550	2,723	625	636
Farm product raw materials, N.E.C.	1972	20	(D)	(D)	(D)	(D)
	1977	21	33,182	1,827	405	123
Chemicals & allied products	1972	217	767,775	25,505	6,320	2,202
	1977	276	1,853,816	48,765	1,210	2,864
Petroleum & petroleum products	1972	1,154	1,343,267	64,901	16,191	8,118
	1977	654	3,153,807	69,973	17,764	5,611
Petroleum bulk stations and terminals	1972	1,023	1,068,512	54,680	13,704	7,002
	1977	516	2,480,344	51,422	13,398	4,357
Petroleum & petroleum products, except bulk stations & terminals	1972	131	274,755	10,221	2,487	1,116
	1977	138	673,463	18,551	4,366	1,254
Beer, wine & distilled alcoholic beverages	1972	409	902,828	51,753	11,358	4,396
	1977	343	1,230,378	84,787	18,616	4,705
Beer & ale	1972	227	363,239	39,164	8,544	3,110
	1977	204	599,841	65,966	14,145	3,400
Wines & distilled alcoholic beverages	1972	182	539,589	12,589	2,814	1,286
	1977	139	630,537	18,822	4,471	1,305

TABLE XX-7. DETAILED STATISTICS FOR WHOLESALE ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

Type of operation	Year	Number of establishments[a]	Sales ($1,000)	Annual payroll ($1,000)	Payroll first quarter ($1,000)	Paid employees 12 March
		Nondurable goods (cont.)				
Misc. nondurable goods	1972	1,087	1,211,891	70,661	16,648	8,671
	1977	964	1,728,356	103,518	24,156	8,690
Farm supplies	1972	442	277,277	19,048	4,492	2,548
	1977	370	406,023	24,587	5,700	2,272
Tobacco & tobacco products	1972	98	308,570	12,212	2,938	1,370
	1977	90	521,028	20,666	4,732	1,506
Paints, varnishes & supplies	1972	115	178,211	8,535	2,079	888
	1977	113	227,834	11,419	2,801	929
Nondurable goods, N.E.C.	1972	432	447,833	30,866	7,139	3,865
	1977	391	573,471	46,846	10,923	3,981
TOTAL NONDURABLE GOODS	1972	4,951	9,552,167	473,331	112,218	50,552
	1977	4,296	16,300,546	676,874	159,583	49,285
TOTAL	1972	12,827	26,545,771	1,397,494	331,797	137,037
	1977	12,572	45,151,519	2,108,920	494,970	141,484

SOURCE: Bureau of the Census, U.S. Census of Wholesale Trade, 1977, Area Series, Michigan (Washington, D.C.: 1980), WC77-A-23, Table I; and similar documents for 1972.

a. Excludes establishments with no paid employment.

(D): Withheld to avoid disclosing data for individual companies.

N.E.C.: not elsewhere classified.

TABLE XX-8. SELECTED DATA FOR WHOLESALE TRADE ESTABLISHMENTS IN MICHIGAN, BY COUNTY: 1972 AND 1977

County	Year	Number of establishments[a]	Sales ($1,000)	Annual Payroll ($1,000)	Paid employees 12 March
Alcona	1972	10	7,428	649	75
	1977	4	D	D	D
Alger	1972	13	4,039	285	40
	1977	10	D	D	D
Allegan	1972	96	75,959	5,281	773
	1977	104	118,281	7,173	654
Alpena	1972	60	39,388	3,227	400
	1977	55	70,313	5,416	447
Antrim	1972	16	7,988	540	71
	1977	17	13,517	1,045	125
Arenac	1972	26	14,339	826	116
	1977	23	27,418	1,236	110
Baraga	1972	14	3,098	171	27
	1977	8	2,952	150	19
Barry	1972	46	13,392	1,069	174
	1977	36	50,315	1,966	168
Bay	1972	148	208,312	14,432	1,603
	1977	158	732,166	25,738	1,898
Benzie	1972	8	(D)	(D)	(D)
	1977	9	6,580	302	23
Berrien	1972	230	214,249	13,915	1,784
	1977	199	299,399	19,798	1,565
Branch	1972	67	87,008	4,415	536
	1977	58	157,551	6,755	576
Calhoun	1972	183	190,807	13,075	1,595
	1977	170	350,388	18,756	1,504
Cass	1972	41	33,315	1,978	266
	1977	32	66,427	2,568	247
Charlevoix	1972	24	8,719	733	112
	1977	16	9,967	831	87

TABLE XX-8. SELECTED DATA FOR WHOLESALE TRADE ESTABLISHMENTS IN MICHIGAN, BY COUNTY: 1972 AND 1977

County	Year	Number of establishments[a]	Sales ($1,000)	Annual Payroll ($1,000)	Paid employees 12 March
Cheboygan	1972	36	16,282	1,081	137
	1977	30	45,120	1,489	138
Chippewa	1972	54	22,013	1,755	227
	1977	47	98,112	3,142	266
Clare	1972	29	16,031	1,197	187
	1977	19	23,961	1,403	174
Clinton	1972	62	59,568	3,533	447
	1977	66	107,188	7,527	678
Crawford	1972	9	4,176	321	49
	1977	13	6,955	577	58
Delta	1972	71	52,596	3,190	389
	1977	65	100,189	4,916	461
Dickinson	1972	65	73,604	4,561	528
	1977	66	147,411	8,674	708
Eaton	1972	81	97,668	9,601	1,025
	1977	71	196,928	19,931	1,233
Emmet	1972	46	25,841	2,661	324
	1977	50	44,688	4,248	357
Genesee	1972	386	635,080	43,050	4,305
	1977	394	1,199,319	64,912	4,355
Gladwin	1972	12	3,486	296	44
	1977	13	9,881	451	49
Gogebic	1972	35	19,684	1,399	196
	1977	28	24,140	1,718	176
Grand Traverse	1972	104	97,819	8,268	1,064
	1977	104	168,122	12,140	926
Gratiot	1972	66	112,482	7,036	837
	1977	61	130,630	6,015	554
Hillsdale	1972	58	47,976	3,560	452
	1977	57	103,350	5,068	501
Houghton	1972	40	15,968	1,427	241
	1977	35	25,116	1,866	204

TABLE XX-8. SELECTED DATA FOR WHOLESALE TRADE ESTABLISHMENTS IN MICHIGAN, BY COUNTY: 1972 AND 1977

County	Year	Number of establishments[a]	Sales ($1,000)	Annual Payroll ($1,000)	Paid employees 12 March
Huron	1972	83	58,319	3,702	486
	1977	68	110,848	6,656	554
Ingham	1972	377	714,884	46,653	4,633
	1977	377	1,172.055	75,382	5,080
Ionia	1972	56	32,026	2,028	308
	1977	52	46,395	3,053	302
Iosco	1972	25	8,693	826	96
	1977	27	15,741	1,216	113
Iron	1972	29	11,331	1,136	136
	1977	17	17,697	1,668	159
Isabella	1972	67	75,997	4,228	490
	1977	65	197,248	8,325	611
Jackson	1972	216	318,918	17,152	1,854
	1977	191	449,428	23,309	1,810
Kalamazoo	1972	334	429,636	35,453	3,583
	1977	340	676,551	51,282	3,726
Kalkaska	1972	11	2,135	136	12
	1977	14	14,320	1,142	88
Kent	1972	965	2,095,315	126,255	12,410
	1977	998	3,403,035	202,084	14,125
Keweenaw	1972	1	(D)	(D)	(D)
	1977	1	D	D	D
Lake	1972	3	682	69	18
	1977	1	D	D	D
Lapeer	1972	57	55,492	2,661	316
	1977	45	50,377	3,211	325
Leelanau	1972	11	5,989	375	36
	1977	12	8,860	528	50
Lenawee	1972	126	95,557	6,484	793
	1977	120	181,657	13,461	1,088

TABLE XX-8. SELECTED DATA FOR WHOLESALE TRADE ESTABLISHMENTS IN MICHIGAN, BY COUNTY: 1972 AND 1977

County	Year	Number of establishments[a]	Sales ($1,000)	Annual Payroll ($1,000)	Paid employees 12 March
Livingston	1972	57	34,493	2,506	279
	1977	76	60,672	6,138	456
Luce	1972	10	4,686	506	94
	1977	8	D	D	D
Mackinac	1972	16	4,185	383	63
	1977	14	6,833	463	51
Macomb	1972	550	1,183,990	64,155	6,246
	1977	626	1,363,960	109,103	7,508
Manistee	1972	27	20,040	1,396	273
	1977	25	32,549	2,052	182
Marquette	1972	97	58,521	5,580	697
	1977	89	123,584	9,690	831
Mason	1972	32	16,150	1,165	193
	1977	29	23,314	1,926	214
Mecosta	1972	25	10,307	808	130
	1977	26	17,907	1,274	124
Menominee	1972	53	42,025	2,391	313
	1977	41	73,238	4,054	343
Midland	1972	43	28,731	2,272	241
	1977	48	50,371	4,202	349
Missaukee	1972	14	6,003	373	55
	1977	10	8,480	541	48
Monroe	1972	94	97,178	5,037	599
	1977	94	159,154	9,124	708
Montcalm	1972	65	37,838	2,718	396
	1977	65	174,765	6,288	545
Montmorency	1972	7	1,566	166	29
	1977	10	3,629	209	27
Muskegon	1972	194	196,931	17,131	2,034
	1977	177	D	D	D

TABLE XX-8. SELECTED DATA FOR WHOLESALE TRADE ESTABLISHMENTS IN MICHIGAN, BY COUNTY: 1972 AND 1977

County	Year	Number of establishments[a]	Sales ($1,000)	Annual Payroll ($1,000)	Paid employees 12 March
Newaygo	1972	37	13,675	1,245	215
	1977	24	23,565	1,797	217
Oakland	1972	2,036	8,055,825	252,722	20,786
	1977	2,591	17,173,217	507,058	28,733
Oceana	1972	20	6,562	739	91
	1977	17	D	D	D
Ogemaw	1972	30	11,794	1,013	104
	1977	22	11,555	829	86
Ontonagon	1972	11	2,242	236	32
	1977	6	2,600	219	25
Osceola	1972	27	15,945	964	156
	1977	17	22,349	903	103
Oscoda	1972	9	1,671	107	24
	1977	8	1,768	160	20
Otsego	1972	30	24,534	1,578	188
	1977	34	43,474	2,394	203
Ottawa	1972	197	201,214	17,220	1,856
	1977	199	366,065	19,962	1,712
Presque Isle	1972	16	4,364	349	74
	1977	15	7,545	425	67
Roscommon	1972	23	5,662	665	104
	1977	17	5,050	573	47
Saginaw	1972	334	462,101	35,008	3,795
	1977	322	764,766	52,505	3,772
St. Clair	1972	141	102,340	8,907	1,080
	1977	124	173,690	12,598	1,063
St. Joseph	1972	72	67,026	4,110	522
	1977	63	143,987	5,320	452
Sanilac	1972	74	60,572	3,502	426
	1977	70	71,210	4,982	466

TABLE XX-8. SELECTED DATA FOR WHOLESALE TRADE ESTABLISHMENTS IN MICHIGAN, BY COUNTY: 1972 AND 1977

County	Year	Number of establishments[a]	Sales ($1,000)	Annual Payroll ($1,000)	Paid employees 12 March
Schoolcraft	1972	18	7,414	666	106
	1977	11	8,702	768	76
Shiawassee	1972	97	95,275	7,223	809
	1977	88	113,376	6,493	580
Tuscola	1972	77	108,088	5,439	614
	1977	83	232,504	9,836	812
Van Buren	1972	80	53,564	3,658	439
	1977	75	78,038	5,388	453
Washtenaw	1972	228	199,072	15,684	1,730
	1977	257	371,247	28,263	2,145
Wayne	1972	3,441	9,161,725	526,852	48,738
	1977	2,802	12,271,694	637,471	40,481
Wexford	1972	48	26,069	2,039	267
	1977	44	48,854	3,902	306
TOTAL	1972	12,872	26,545,771	1,397,494	137,037
	1977	12,572	45,151,519	2,108,920	141,484

SOURCE: Bureau of the Census, U.S. Census of Wholesale Trade, 1977, Area Series, Michigan (Washington, D.C.: 1980), WC77-A-23, Table 4; and similar document for previous year.

a. Excludes establishments with no paid employment.

D.: Data withheld to avoid disclosing figures for individual companies.

TABLE XX-9. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN WHOLESALE TRADE ESTABLISHMENTS AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979

County	Labor and proprietors' earnings in wholesale trade			
	1978		1979	
	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Dickinson	10.21	15,326	9.26	15,890
Oakland	8.38	641,140	9.08	804,732
Kent	8.19	255,702	8.16	298,433
Tuscola	7.96	15,147	7.88	17,364
Menominee	7.70	7,442	7.71	8,467
Branch	6.88	14,744	6.52	15,757
Genesee	5.74	222,180	5.98	248,938
Huron	5.72	9,150	5.72	10,529
Wayne	5.30	1,110,854	5.43	1,222,545
Montcalm	6.35	11,429	5.15	10,106
Bay	5.16	29,692	4.95	31,281
Emmet	5.25	5,795	4.86	6,077
Grand Traverse	4.08	13,577	4.67	17,735
Hillsdale	4.52	7,590	4.63	8,826
Livingston	3.65	8,658	4.41	12,675
Isabella	4.17	8,416	4.25	9,695
Berrien	3.54	35,407	4.09	43,667
Macomb	3.50	156,332	4.08	197,301
Wexford	4.26	4,917	4.02	5,309
Shiawassee	4.14	9,037	4.01	10,766
Ottawa	4.16	32,912	3.96	36,323
Kalamazoo	3.77	2,183	3.67	2,401
Gratiot	4.21	8,397	3.84	8,237
Alpena	3.92	6,367	3.82	6,914
Gogebic	3.77	2,183	3.67	2,401
Ogemaw	3.64	1,544	3.61	1,907
Ionia	3.40	6,347	3.57	7,230
Delta	3.57	5,849	3.52	6,539
Ingham	3.60	93,654	3.51	103,565
Allegan	3.28	8,248	3.43	9,688
Muskegon	4.14	36,962	3.38	33,477
Monroe	3.38	15,621	3.37	16,999
Van Buren	3.15	6,626	3.25	7,654
Gladwin	2.56	913	3.20	1,455
St. Clair	3.24	17,986	3.20	18,815

TABLE XX-9. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN WHOLESALE TRADE ESTABLISHMENTS AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979 (cont.)

	Labor and proprietors' earnings in wholesale trade			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Sanilac	3.27	4,676	3.20	5,192
Newaygo	2.46	2,365	3.19	3,211
Marquette	2.72	11,358	3.15	14,466
Oceana	2.67	1,494	3.12	1,959
Jackson	3.09	27,879	3.09	30,698
Otsego	(D)	(D)	2.97	2,617
Saginaw	3.13	53,967	2.97	56,068
Chippewa	3.00	2,992	2.88	3,069
Lenawee	2.97	12,765	2.83	13,938
Antrim	2.42	1,291	2.78	1,645
Lapeer	2.66	5,785	2.51	5,921
Mason	2.35	2,565	2.44	3,015
St. Joseph	3.07	8,390	2.41	7,618
Manistee	2.40	2,371	(D)	(D)
Iosco	2.66	3,135	2.33	2,959
Mackinac	2.40	922	2.15	915
Cass	2.08	3,432	2.03	3,651
Clare	2.00	1,121	2.03	1,293
Houghton	2.07	2,464	1.99	2,668
Osceola	3.24	1,951	1.95	1,308
Washtenaw	1.77	43,394	1.75	48,372
Charlevoix	1.67	1,418	1.63	1,604
Benzie	1.31	481	1.52	624
Mecosta	1.34	1,369	1.33	1,533
Alger	1.02	339	1.08	358
Midland	.53	3,173	.83	5,611
Schoolcraft	(D)	(D)	.58	210
Alcona	(D)	(D)	(D)	(D)
Arenac	(D)	(D)	(D)	(D)
Baraga	(D)	(D)	(D)	(D)
Barry	(D)	(D)	(D)	(D)
Calhoun	(D)	(D)	(D)	(D)
Cheboygan	(D)	(D)	(D)	(D)
Clinton	(D)	(D)	(D)	(D)
Crawford	(D)	(D)	(D)	(D)

TABLE XX-9. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN WHOLESALE TRADE ESTABLISHMENTS AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979 (cont.)

	Labor and proprietors' earnings in wholesale trade			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Eaton	(D)	(D)	(D)	(D)
Iron	(D)	(D)	(D)	(D)
Kalkaska	(D)	(D)	(D)	(D)
Keweenaw	(D)	(D)	(D)	(D)
Lake	(D)	(D)	(D)	(D)
Leelanau	(D)	(D)	(D)	(D)
Luce	(D)	(D)	(D)	(D)
Missaukee	(D)	(D)	(D)	(D)
Montmorency	(D)	(D)	(D)	(D)
Ontonagon	(D)	(D)	(D)	(D)
Oscoda	(D)	(D)	(D)	(D)
Presque Isle	(D)	(D)	(D)	(D)
Roscommon	(D)	(D)	(D)	(D)
Michigan	5.01	3,160,111	5.21	3,610,454
United States	6.55	86,504,000	6.67	99,051,000

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

NORE: Counties are ranked according to this secotr's relative contribution to total labor and proprietors' earnings (next-to-last column). These numbers pertain to earnings generated within the county, irrespective of the residence of the people who received them. For a complete tabulation of earnings at the state level, see Table VI-2 and VI-3. THe earnings residence adjustment for all industries is shown in Table VI-12.

(D): WIthheld to avoid disclosing data for individual companies.

TABLE XX-10. RANKING OF MICHIGAN COUNTIES ACCORDING TO PERCENTAGE CHANGE IN LABOR AND PROPRIETORS' EARNINGS IN WHOLESALE TRADE: 1978-1979

County	Percentage change 1974-1979	Percentage change 1978-1979	County	Percentage change 1974-1979	Percentage change 1978-1979
Midland	157	77	Houghton	36	6
Gladwin	68	52	Wexford	48	6
Livingston	170	43	Cass	-15	5
Newaygo	124	38	Emmet	38	5
Grand Traverse	142	30	Bay	26	4
Antrim	353	29	Dickinson	150	4
Benzie	144	29	Saginaw	15	4
Marquette	108	27	St. Clair	38	4
Oceana	209	27	Chippewa	51	2
Macomb	113	25	Lapeer	100	2
Oakland	153	24	Mackinac	58	-1
Berrien	85	23	Gratiot	54	-2
Ogemaw	153	22	Iosco	D	-5
Shiawassee	118	19	St. Joseph	9	-9
Mason	95	18	Muskegon	43	-10
Alger	33	17	Montcalm	210	-12
Allegan	132	16	Osceola	14	-33
Clare	123	16	Alcona	D	D
Kalamazoo	67	16	Arenac	D	D
Kent	68	16	Baraga	D	D
Hillsdale	110	15	Barry	D	D
Huron	267	15	Calhoun	D	D
Tuscola	102	15	Cheboygan	D	D
Menominee	122	14	Clinton	D	D
Van Buren	83	14	Crawford	D	D
Ionia	172	13	Eaton	D	D
Genesee	74	12	Iron	D	D
Isabella	64	12	Kalkaska	D	D
Sanilac	135	12	Keweenaw	D	D
Washtenaw	60	11	Lake	D	D
Charlevoix	54	10	Leelanau	d	D
Delta	67	10	Luce	D	D
Ingham	98	10	Manistee	D	D
Jackson	24	10	Missaukee	D	D
Mecosta	11	10	Montmorency	D	D
Ottawa	70	10	Ontonagon	D	D
Wayne	6	10	Oscoda	D	D
Gogebic	31	9	Otsego	105	D
Alpena	79	8	Presque Isle	D	D
Monroe	142	8	Roscommon	D	D
Branch	60	7	Schoolcraft	D	D
Lenawee	108	7	Michigan	51	14

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

D: Data withheld to avoid disclosing figures for individual companies.

XXI. RETAIL TRADE

The first postwar business census was for 1948. Currently, the U.S. Bureau of the Census is authorized to conduct canvasses every five years, for years ending in 2 and 7. These economic censuses of industrial and business establishments cover construction, manufacturing, mining, retail trade, selected services, selected transportation industries, and wholesale trade. Establishments are classified on the basis of major economic activity, and those primarily engaged in selling goods for personal or household consumption are grouped under retail trade. They are further classified according to kind of business, which usually reflects commodity groupings. For example, food stores include establishments primarily selling food for preparation and consumption in the home. In some cases, such as variety stores, the classification is based on variety of merchandise, price range, or manner of doing business.

Beginning in 1954, the Census of Retail Trade has excluded firms with no paid employees during the census year unless they reported sales of $2,500 or more. Firms with no paid employees were not canvassed, their sales figures and classification being obtained from income tax returns.

Several changes made in the kind-of-business definitions between 1967 and 1972 limit comparability between the two censuses. Electrical supply stores; plumbing and heating equipment dealers; farm equipment dealers; hay, grain, and feed stores; and other farm supply stores are no longer classified in retail trade, but are designated as wholesalers. Within retail trade itself there also have been several changes, such as the transfer of bedding and linen shops from miscellaneous general merchandise stores to miscellaneous home furnishings stores. In Table XXI-3 the 1972 retail trade aggregates for the state are reported on the basis of the 1967 classification as well as the current one. The 1977 figures are on the basis of the 1972 classification.

It is customary in an economic census to classify each establishment separately, irrespective of whether it is part of a larger organization. For example, each McDonald's is counted as one restaurant.

Sales reported in the Census of Retail Trade do not include retail sales incidental to other kinds of business, such as wholesaling or services. They do include total receipts, including accruals, of retail establishments, even though some of these receipts were from servicing merchandise, carrying charges, delivering merchandise, wholesaling to other retailers, and so forth. Trade-in allowances are not deducted, but refunds and allowances for merchandise returned are. Sales and excise taxes are included, but nonoperating income (rental of real estate, interest or dividends on investments, and so forth) is not. Sales figures include sales so defined of all establishments with a sales volume of $2,500 or more at any time during the year, whereas the number of establishments in the Census of Retail Trade excludes those that have gone out of business during the year. Also included are establishments in operation less than the full year, with reported sales of less than $2,500, if they could have expected reaching the $2,500 figure on the basis of year-round operation.

Payroll is as defined by the Internal Revenue Service. It includes wages and salaries, gratuities reported to the employer, commissions, bonuses, vacation and sick leave pay before deducting employees' income taxes, Social Security taxes, union dues, and so forth. Payments in kind, such as free restaurant meals, are included.

Employment for the pay period including 12 March 1977 consists of paid employees of corporations and unincorporated businesses, including salaried officers and executives of corporations, but excluding proprietors and partners of unincorporated businesses. Employees on paid sick leave or on holiday or paid vacation also are included.

All data exclude the activities of central administrative offices such as Kresge Headquarters in Troy. Auxiliaries, such as regional warehouses that supply retail outlets but conduct no retail business themselves, are excluded also.

Monthly Retail Trade, a publication of the U.S. Bureau of the Census, is based upon reports from a sample of establishments in the United States. Separate data on sales volume also are available for large states and Standard Metropolitan Statistical Areas. Department store sales figures are published for several large and small Standard Metropolitan Statistical Areas, and for several cities, but not for states. Michigan data from the annual summary issues of Monthly Retail Trade are reproduced in Tables XXI-11 and XXI-12.

The Bureau of Environmental Health, Michigan Department of Public Health, is responsible for enforcing Michigan law relative to food service establishments and vending machines from which are dispensed perishable foods and beverages. Statistics collected as a by-product are presented in Table XXI-14.

The Michigan Liquor Control Commission has a monopoly on the wholesaling of liquor (but not beer and wine) in the state. It also licenses all retail outlets for consumption of liquor, wine, and beer on or off premises.

National Petroleum News, a McGraw-Hill, Inc., publication, presents a variety of information about branded gasoline service stations in its mid-May fact book issue. Some very small independent organizations are not listed, however. Table XXI-15 covers those that are.

Personal income data are released by the Bureau of Economic Analysis, U.S. Department of Commerce. Personal income statistics are discussed in chapter VI; those covering earnings in retail trade are shown in Tables XXI-9 and XXI-10.

XXI. RETAIL TRADE

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TABLE XXI-1. AVERAGE WAGE AND SALARY EMPLOYMENT AND WEEKLY HOURS AND EARNINGS OF SALES WORKERS IN MICHIGAN AND THE UNITED STATES RETAIL TRADE ESTABLISHMENTS: 1956-1980

	Michigan				United States			
	Employment	Weekly		Hourly	Employment	Weekly		Hourly
Year	(000)	Hours	Earnings	earnings	(000)	Hours	Earnings	earnings
1956	370.6	38.9	65.55	1.69	7,840	38.6	50.18	1.30
1957	356.0	37.6	65.46	1.74	7,858	38.1	52.20	1.37
1958	332.1	37.1	64.18	1.73	7,770	38.1	54.10	1.42
1959	322.9	37.3	66.32	1.78	8,045	38.2	56.15	1.47
1960	348.0	37.6	67.27	1.79	8,247	38.0	57.76	1.52
1961	340.1	38.0	69.58	1.83	8,204	37.6	58.66	1.56
1962	342.4	37.7	74.04	1.96	8,368	37.4	60.96	1.63
1963	345.0	38.7	74.57	1.93	8,530	37.3	62.66	1.68
1964	365.2	38.4	72.69	1.92	8,823	37.0	64.75	1.75
1965	390.7	38.5	76.73	1.99	9,250	36.6	66.61	1.82
1966	410.7	37.6	78.88	2.10	9,648	35.9	68.57	1.91
1967	419.7	37.0	81.25	2.20	9,917	35.3	70.95	2.01
1968	433.8	36.1	86.50	2.40	10,320	34.7	74.95	2.16
1969	455.9	35.0	93.98	2.69	10,798	34.2	78.66	2.30
1970	458.3	34.4	97.87	2.85	11,047	33.8	82.47	2.44
1971	460.7	34.3	108.18	3.15	11,351	33.7	87.62	2.60
1972	478.9	35.1	118.32	3.38	11,836	33.4	91.85	2.75
1973	503.3	34.6	124.84	3.61	12,329	33.1	96.32	2.91
1974	510.9	34.3	129.08	3.77	12,554	32.7	102.68	3.14
1975	509.6	34.5	141.62	4.11	12,645	32.4	108.86	3.36
1976	531.1	33.9	146.12	4.31	13,209	32.1	114.60	3.57
1977	557.1	34.0	156.88	4.61	13,808	31.6	121.66	3.85
1978	584.9	34.0	174.22	5.12	14,573	31.0	130.20	4.20
1979	590.9	33.2	186.32	5.61	15,066	30.6	138.62	4.53
1980	576.8	32.2	189.63	5.89	15,292	30.1	146.89	4.88

SOURCE: Michigan Employment Security Commission Special Release, and Bureau of Labor Statistics, Employment and Earnings (Washington, D.C.; Monthly), April 1981, Tables B-1 and B-20.

TABLE XXI-2. COMPARATIVE MICHIGAN RETAIL TRADE STATISTICS: 1972-1977

Kind of business	Michigan sales as a percentage of U.S. sales		Percentage increase in sales 1972-1977	
	1972	1977	Michigan	U.S.
Fruit stores & vegetable markets	6.0	9.8	155.2	56.5
Retail nurseries, lawn, & garden supply	7.3	6.2	84.0	115.6
Candy, nuts, & confectionary	4.8	6.0	17.2	- 7.0
Boat dealers	n.a.	5.9	64.7[a]	61.1[a]
Drinking places	6.0	5.8	15.9	18.7
Household appliance stores	5.8	5.8	23.3	23.8
Hardware stores	5.7	5.7	53.6	53.8
Radio & television stores	n.a.	5.5	102.0[a]	71.1[a]
Women's ready-to-wear stores	5.3	5.4	49.6	47.2
Automatic merchandising machine operators	5.3	5.3	30.3	31.1
Recreational & utility trailer dealers	n.a.	5.3	92.8[a]	137.7[a]
New & used motor vehicle dealers	5.0	5.2	71.0	66.3
Men's & boys' clothing & furnishings stores	5.0	5.2	30.6	24.3
Department stores	4.9	5.1	55.8	50.6
Sporting goods & bicycle shops	5.8	5.1	61.8	83.4
Floor covering stores	n.a.	5.0	57.9[a]	65.2[a]
Drapery, curtain, & upholstery stores	n.a.	4.9	37.9[a]	35.4[a]
Hobby, toy, & game stores	4.3	4.9	123.3	94.8
Motor cycle dealers	n.a.	4.8	- 3.1[a]	62.2[a]
Children's & infants' wear stores	n.a.	4.6	158.8[a]	74.0[a]
Gasoline service stations	4.4	4.6	74.9	67.8
Miscellaneous food stores	n.a.	4.6	136.9[a]	108.3[a]
Retail bakeries	5.0	4.6	28.4	38.2
Drug stores	4.8	4.5	39.7	48.7
Miscellaneous apparel & accessory stores	n.a.	4.5	232.8[a]	141.6[a]
Shoe stores	4.4	4.5	43.7	38.7
Book stores	4.2	4.4	113.4	102.8
Women's specialty & accessory, & furriers	3.7	4.4	29.0	7.2
Meat & seafood markets	3.8	4.3	50.5	34.5
Florists	4.3	4.2	45.2	49.6
Direct selling establishments	2.8	4.1	82.1	25.2
Grocery stores	4.7	4.1	39.1	58.3
Lumber & other bldg. materials dealers	n.a.	4.1	53.0[a]	81.0[a]
Miscellaneous retail stores	n.a.	4.1	86.2[a]	75.8[a]
Camera & photographic supply stores	4.7	4.0	29.9	52.7
Eating places	4.0	4.0	83.8	82.9
Miscellaneous automotive dealers	n.a.	4.0	- 17.9[a]	9.3[a]
Record shops & musical instrument stores	n.a.	4.0	45.7[a]	87.4[a]
Sewing, needlework, & piece goods stores	3.5	3.9	37.6	23.5
Auto & home supply stores	3.7	3.8	68.8	70.5
Furniture stores	3.7	3.8	38.3	34.6
Gift, novelty, & souvenir stores	3.6	3.7	117.1	111.4
Jewelry stores	4.0	3.7	65.0	74.1
Cigar stores & stands	2.9	3.6	35.5	9.0
Variety stores	3.7	3.6	- 5.7	- 3.4
Bottled gas dealers	n.a.	3.4	117.9[a]	105.4[a]
Luggage & leather goods stores	4.4	3.3	39.0	85.1
Paint, glass, & wallpaper stores	n.a.	3.3	50.6[a]	54.3[a]
Miscellaneous home furnishings stores	n.a.	3.3	62.3[a]	110.1[a]
Mobile home dealers	3.8	3.3	- 8.3	3.0
Used car dealers	3.0	3.1	59.2	53.5
Family clothing stores	2.5	3.0	95.5	63.5
News dealers & newsstands	n.a.	3.0	37.1[a]	9.4[a]
Stationary stores	2.8	3.0	60.2	48.4
Used merchandise stores	3.2	3.0	79.7	90.7
Dairy products stores	n.a.	2.6	- 6.3[a]	25.4[a]
Miscellaneous general merchandise stores	2.4	2.4	46.7	49.2
Fuel oil dealers	n.a.	2.1	120.0[a]	123.1[a]
Liquor stores	1.9	2.1	46.6	31.3
Fuel & ice dealers	n.a.	2.0	- 36.5[a]	- 5.0[a]
Mail order houses	2.0	2.0	59.4	65.2
TOTAL	4.5	4.4	55.3	58.1

[a] Establishments with payroll only.

n.a.: not available.

TABLE XXI-2. COMPARATIVE MICHIGAN RETAIL TRADE STATISTICS: 1972-1977 (cont.)

Sales per establishment 1977 ($000)		Payroll per employee 1977 ($)		Payroll as a percentage of receipts 1977	
Michigan	United States	Michigan	United States	Michigan	United States
295.8	138.6	5,526	5,823	8.4	9.3
202.5	115.5	8,901	7,286	15.4	16.7
95.0	71.6	5,650	4,207	19.7	15.8
494.6	396.6	11,513	9,684	9.9	9.9
105.7	82.1	4,117	4,179	18.8	20.2
414.3	269.7	9,684	8,855	10.7	12.8
264.3	230.1	7,357	7,200	13.1	14.2
297.9	212.8	9,551	8,880	11.9	13.0
476.7	277.2	5,830	5,366	14.2	14.3
339.7	292.5	10,106	8,931	17.4	17.7
556.3	553.1	11,132	10,260	8.1	7.5
5,358.5	3,958.1	14,624	13,006	7.7	8.4
414.9	306.1	8,323	7,561	16.7	16.1
12,180.6	8,732.8	8,328	6,535	14.6	14.0
153.6	147.7	8,001	6,924	12.7	12.8
283.3	234.5	11,931	10,283	15.0	14.7
89.5	67.6	5,962	6,657	17.9	19.5
103.5	95.4	4,844	5,326	11.4	11.5
383.1	310.0	8,292	8,761	10.5	11.2
186.1	140.9	4,590	4,646	14.2	14.0
394.2	320.0	5,323	5,694	6.4	7.1
103.5	98.8	5,230	5,594	9.9	12.2
126.9	115.5	4,634	4,782	27.6	29.1
553.0	468.0	7,298	6,804	13.0	13.6
116.9	78.7	6,416	5,879	18.5	16.8
245.7	202.6	7,257	6,782	14.6	14.9
177.6	144.7	5,914	5,447	12.0	13.5
175.0	116.8	6,724	5,958	15.1	15.0
290.6	224.3	6,773	6,937	11.1	11.2
98.0	81.7	5,671	5,288	21.7	21.3
453.8	351.2	8,366	6,885	18.2	20.7
1,019.7	926.2	9,479	7,884	9.3	9.3
871.2	854.6	11,957	10,367	10.7	10.8
61.3	60.9	8,663	7,882	18.7	19.3
284.5	206.4	7,703	7,910	12.3	12.1
234.3	202.6	3,991	4,093	25.6	25.8
121.9	130.1	7,940	8,325	8.4	9.6
208.9	209.0	6,819	7,360	13.2	13.7
100.2	102.7	3,663	4,160	13.6	14.0
302.5	273.9	10,006	9,384	15.5	15.6
433.7	344.6	10,986	9,466	16.0	15.3
74.6	75.6	5,001	4,836	15.2	14.8
186.0	159.2	7,913	7,945	17.0	16.7
166.8	126.8	4,739	5,509	9.9	10.7
470.7	408.3	5,177	4,680	14.8	14.4
478.6	410.5	9,947	9,411	12.0	12.7
151.7	144.3	6,488	6,603	16.2	15.7
202.7	206.0	9,206	8,886	17.5	15.4
91.4	110.1	6,177	6,597	16.3	15.9
448.6	492.5	11,751	11,085	7.9	8.2
200.0	187.6	10,717	8,851	7.4	7.2
394.9	373.7	5,221	5,651	12.6	13.3
52.2	68.6	5,055	4,606	10.2	12.7
198.1	174.3	7,023	6,393	16.8	16.6
57.8	57.2	6,812	6,447	19.6	18.4
85.1	151.7	3,192	4,021	13.0	11.6
470.4	437.5	6,517	6,133	10.6	10.1
540.2	648.3	9,083	10,898	7.8	9.5
295.6	292.4	5,441	6,277	6.8	7.5
72.0	112.6	5,792	7,481	8.3	12.5
486.6	689.5	6,632	8,797	10.0	14.9
475.9	389.8	7,106	6,584	12.0	12.3

SOURCE: Developed from Bureau of the Census, *1977 Census of Retail Trade, Geographic Area Series, Michigan* (Washington, D.C.: 1976), RC77-A-23, Tables 1 and 2, and *1972 Census of Retail Trade, Area Series, Michigan* (Washington, D.C.: 1974), RC72-A-23, Table 1; and similar documents for the United States.

TABLE XXI-3. SUMMARY STATISTICS FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN AND THE UNITED STATES: 1947, 1954, 1958, 1963, 1967, 1972 AND 1977

	All establishments[a]				Establishments with payroll							
	Number (000)		Sales ($1,000,000)		Number (000)		Sales ($1,000,000)		Annual payroll ($1,000,000)		Paid employees[b] (000)	
Year	Mich.	U..S.	Mich.	U.S.	Mich.	U.S.	Mich.	U.S.	Mich.	U.S.	Mich.	U.S.
1947[c]	68,756	1,771,317	5,950	130,520	n.a.	n.a.	n.a.	n.a.	663	14,186	311	7,083
1947	65,990	1,668,479	5,854	128,849	48,040	1,118,692	5,477	118,352	n.a.	n.a.	n.a.	n.a.
1954	67,995	1,721,650	8,168	169,968	50,331	1,124,040	7,776	157,933	879	18,199	325	7,124
1958	72,379	1,794,744	8,898	200,365	52,291	1,185,036	8,471	187,768	946	21,673	337	7,942
1963	69,758	1,707,931	10,855	244,202	51,568	1,206,087	10,431	233,085	1,110	27,632	340	8,410
1967	63,569	1,763,324	14,114	310,214	46,921	1,191,546	13,667	295,170	1,553	36,175	398	9,380
1972[d]	72,413	1,934,466	20,938	470,806	49,729	1,286,517	20,301	451,987	2,412	56,385	466	11,360
1972[e]	71,795	1,912,871	20,630	459,040	49,111	1,264,922	19,993	440,222	2,383	55,372	462	11,210
1972[f]	65,854	1,780,441	20,546	457,405	49,111	1,264,922	19,993	440,222	2,383	55,372	462	11,210
1977[f]	67,059	1,855,068	31,912	723,134	48,431	1,303,621	31,090	699,635	3,720	85,854	524	13,040

SOURCE: Bureau of the Census, 1977 Census of Retail Trade, Geographic Area Series, Michigan (Washington, D.C.: 1979), RC77-A-23, Table 1; Bureau of the Census, U.S. Census of Retail Trade, 1972, Area Series Michigan (Washington, D.C.: 1974), RC72-A-23, Table 1 and 7; Bureau of the Census, U.S. Census of Business, 1967, Retail Trade,Michigan (Washington, D.C.: 1969), BC67-RA24, Table 2, and similar census documents for 1963 (BC63-RA24, Table 2), 1958 (BC58-RA22, Table 101), 1954 (R-1-22, Tables 101 and 101A), and 1948 (vol. 3 Michigan section, Table 101); and similar documents for the United States.

a. Excludes establishments with no paid employment and with annual sales volume less than $2,500.
b. Week including 15 November for 1947-1963; week including 12 March for 1967.
c. Unrevised statistics. Based upon reports from establishments with sales volume of $500 or over.
d. Based on 1967 Standard Industrial Classification.
e. Based on 1972 Standard Industrial Classification, including direct selling establishments without payroll.
f. Based on 1972 Standard Industrial Classification, excluding direct selling establishments without payroll.
n.a.: not available.

TABLE XXI-4. RANKING OF STATES ACCORDING TO PERCENTAGE CHANGE IN SALES BY RETAIL TRADE ESTABLISHMENTS: 1972-1977.

State	Change	State	Change	State	Change
Dist. of		Indiana	59.3	Kentucky	70.3
Columbia	16.0	Wisconsin	60.7	Arizona	71.5
New York	29.4	Florida	61.1	West Virginia	71.7
Rhode Island	38.8	Nebraska	61.1	Louisiana	72.1
Massachusetts	38.9	South Carolina	61.4	New Mexico	74.8
New Jersey	44.2	Kansas	61.5	Utah	75.2
Connecticut	44.5	Maine	61.9	Montana	76.4
Delaware	44.5	Tennessee	61.9	North Dakota	76.5
Pennsylvania	47.9	Minnesota	62.4	Hawaii	76.6
Vermont	51.2	Alabama	62.6	Texas	77.4
Illinois	51.3	Arkansas	63.2	Oregon	80.1
Maryland	51.7	Virginia	64.9	Washington	80.2
Georgia	52.9	California	65.8	Idaho	81.7
Michigan	54.7	South Dakota	66.0	Nevada	91.9
Missouri	55.0	New Hampshire	66.2	Wyoming	102.7
Ohio	55.4	Oklahoma	67.0	Alaska	137.3
Mississippi	56.1	Iowa	67.3		
North Carolina	58.1	Colorado	67.4	United States	58.1

SOURCE: Developed from U.S. Bureau of the Census, Census of Retail Trade, 1977 Geographic Area Series, Michigan (Washington, D.C.: 1979), Table 1; and similar documents for other states, the District of Columbia, and the United States.

TABLE XXI-5. RANKING OF STATES ACCORDING TO SALES PER RETAIL TRADE ESTABLISHMENT: 1977

(In thousands of dollars)

State	1977	State	1977	State	1977
Maryland	502.2	Minnesota	403.7	Rhode Island	344.3
Dist. of		Massachusetts	395.2	Iowa	342.2
Columbia	494.8	Connecticut	394.2	Idaho	341.0
Alaska	484.2	Louisiana	387.4	Alabama	339.0
Nevada	483.0	Colorado	382.7	Nebraska	337.4
Michigan	475.9	FLorida	381.9	North Dakota	336.7
Illinois	461.4	West Virginia	380.6	North Carolina	332.7
Hawaii	445.9	Texas	379.9	Kansas	329.1
Virginia	444.3	New Hampshire	379.7	Oklahoma	328.2
Delaware	433.3	Pennsylvania	377.3	Maine	321.6
Ohio	431.6	Missouri	368.4	Montana	320.7
California	431.4	Georgia	356.8	South Carolina	310.5
Washington	423.7	New York	356.5	Arkansas	293.1
Indiana	418.5	Tennessee	355.8	Vermont	290.7
Utah	418.0	Wyoming	352.5	Mississippi	288.1
Oregon	410.2	Wisconsin	348.7	South Dakota	286.5
Arizona	408.3	Kentucky	348.5		
New Jersey	407.7	New Mexico	346.6	United States	389.8

SOURCE: Developed from U.S. Bureau of the Census, Census of Retail Trade, 1977, Geographic Area Series, United States (Washington, D.C.: 1978), RC77-A-52, Table 4; and Bureau of Economic Analysis, Regional Economics Information System.

TABLE XXI-6. DETAILED STATISTICS FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977

Kind of business	Year	All establishments[a]		Establishments with payroll				
						Payroll ($1,000)		Paid employees[b]
		Number	Sales ($1,000)	Number	Sales ($1,000)	Entire year	First quarter	12 March
Building materials, hardware, garden supply, and mobile home dealers								
Building materials and supply stores	1972	1,557	717,071	1,287	707,030	84,757	19,323	9,953
	1977	1,562	1,096,039	1,261	1,080,288	120,393	26,832	10,408
Lumber and other building material dealers	1972	(c)	(c)	948	655,499	76,327	17,200	8,664
	1977	1,166	1,015,778	937	1,002,657	106,832	23,551	8,935
Paint, glass, and wallpaper stores	1972	(c)	(c)	339	51,531	8,430	2,123	1,289
	1977	396	80,261	324	77,631	13,561	3,281	1,473
Hardware stores	1972	1,327	226,491	979	212,164	25,884	5,812	4,918
	1977	1,316	374,831	986	328,862	43,076	9,862	5,855
Retail nurseries, lawn, garden supply stores	1972	252	60,183	147	57,434	7,121	1,352	1,152
	1977	547	110,761	265	101,249	15,631	3,095	1,756
Mobile home dealers	1972	441	140,429	307	132,976	10,079	2,229	1,472
	1977	287	128,751	196	121,566	9,636	1,850	820
Total	1972	3,577	1,144,174	2,720	1,109,604	127,841	28,716	17,495
	1977	3,712	1,683,382	2,708	1,631,965	188,736	41,639	18,839
General merchandise group stores								
Department stores	1972	346	2,494,147	346	2,494,147	324,757	73,067	60,042
	1977	319	3,885,615	319	3,885,615	567,[illegible]4	113,906	68,180
Variety stores	1972	712	272,666	626	270,265	40,300	8,962	9,634
	1977	546	257,009	461	252,943	37,528	8,609	7,249
Misc. general merchandise stores	1972	559	162,621	394	156,948	18,356	4,078	3,958
	1977	507	238,513	359	230,587	24,438	5,573	3,750
Total	1972	1,617	2,929,434	1,366	2,921,360	383,413	86,017	73,634
	1977	1,372	4,381,137	1,139	4,369,145	629,750	127,088	79,179
Food stores								
Grocery stores	1972	6,634	4,393,783	4,890	4,289,122	355,968	83,688	60,809
	1977	5,993	6,110,863	4,650	5,980,923	558,991	129,210	58,974
Meat, fish (seafood) mkts., incl. fzr. provisioners	1972	490	106,974	359	101,051	10,409	2,429	2,003
	1977	554	161,010	399	150,783	16,804	4,035	2,481

TABLE XXI-6. DETAILED STATISTICS FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

Kind of business	Year	All establishments[a]		Establishments with payroll				
						Payroll ($1,000)		Paid employees 12 March[b]
		Number	Sales ($1,000)	Number	Sales ($1,000)	Entire year	First quarter	
Food stores (cont.)								
Freezer/locker meat provisioners	1972	(c)	(c)	35	12,946	1,655	412	326
	1977	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Meat markets	1972	(c)	(c)	287	83,337	8,351	1,922	1,568
	1977	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Fish markets (seafood)	1972	(c)	(c)	37	4,768	403	95	109
	1977	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Fruit stores and vegetable mkts.	1972	411	41,834	205	36,888	3,164	533	641
	1977	361	106,771	176	96,821	8,118	1,682	1,469
Candy, nut, and confectionery stores	1972	540	33,160	299	28,454	5,605	1,337	1,616
	1977	409	38,866	267	34,149	6,724	1,472	1,190
Retail bakeries	1972	1,048	82,806	902	78,371	18,866	4,500	5,672
	1977	838	106,362	669	95,196	26,255	6,096	5,666
Retail bakeries, baking/selling	1972	(c)	(c)	596	53,220	15,461	3,614	4,711
	1977	(c)	(c)	570	83,189	23,792	5,458	5,094
Retail bakeries, selling only	1972	(c)	(c)	306	25,151	3,405	886	961
	1977	(c)	(c)	99	12,007	2,463	638	572
Other food stores	1972	694	51,443	331	36,441	4,171	921	1,370
	1977	878	83,901	316	53,190	5,940	1,375	1,481
Dairy pro. stores	1972	(c)	(c)	229	23,146	2,642	604	1,044
	1977	378	32,159	170	21,699	2,828	640	886
Misc. food stores	1972	(c)	(c)	102	13,295	1,529	317	326
	1977	500	51,742	146	31,491	3,112	735	596
Total	1972	9,817	4,710,000	6,986	4,570,327	398,183	93,408	72,111
	1977	9,033	6,607,773	6,477	6,411,062	622,832	143,870	71,261
Automotive dealers								
Motor vehicle dlrs., new and used cars	1972	1,236	3,678,554	1,197	3,675,715	322,999	77,229	31,615
	1977	1,174	6,290,913	1,174	6,290,913	486,762	116,237	33,285
With domestic car franchise only	1972	(c)	(c)	895	2,651,892	228,419	55,060	22,595
	1977	(c)	(c)	867	4,678,024	352,382	84,748	23,986
With imported car franchise only	1972	(c)	(c)	100	134,576	19,073	4,610	1,920
	1977	(c)	(c)	100	255,867	27,597	6,271	2,057
Both	1972	(c)	(c)	202	889,247	75,507	17,599	7,100
	1977	(c)	(c)	207	1,357,022	106,783	25,218	7,242

TABLE XXI-6. DETAILED STATISTICS FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

Kind of business	Year	All establishments[a] Number	All establishments[a] Sales ($1,000)	Establishments with payroll Number	Establishments with payroll Sales ($1,000)	Payroll ($1,000) Entire year	Payroll ($1,000) First quarter	Paid employees 12 March[b]
				Automotive dealers (cont.)				
Motor vehicle dlrs.,	1972	1,009	136,665	400	106,095	7,017	1,621	1,033
used cars only	1977	1,083	217,539	383	160,455	11,885	2,482	1,109
Auto/home supply		1,303	290,139	953	279,096	43,742	9,836	6,061
stores	1977	1,619	489,732	1,208	470,422	72,971	16,482	7,293
Tire, batter, and	1972	(cc)	(c)	818	238,856	39,118	8,788	5,353
accessory dealers	1977	(c)	(c)	1,085	411,524	66,979	15,120	6,552
Other	1972	(c)	(c)	135	40,240	4,624	1,048	708
	1977	(c)	(c)	123	58,898	5,992	1,362	741
Misc. auto.	1972	1,024	303,841	674	290,966	26,185	5,322	3,573
dealers	1977	1,094	434,554	695	413,459	38,616	7,681	3,791
Boat dealers	1972	(c)	(c)	238	91,387	8,587	1,761	1,225
	1977	311	153,828	240	150,471	14,967	2,861	1,300
Recreational/util.	1972	(c)	(c)	145	76,938	5,445	1,140	702
trailer dealers	1977	278	154,655	188	148,323	12,078	2,382	1,085
Motorcycle dealers	1972	(c)	(c)	171	94,085	9,565	1,860	1,276
	1977	247	94,626	190	91,214	9,602	1,965	1,158
Auto dealers	1972	(c)	(c)	120	28,556	2,588	561	370
N.E.C.	1977	258	31,445	77	23,451	1,969	473	248
Total	1972	4,572	4,409,199	3,224	4,351,872	399,943	94,008	42,282
	1977	4,970	7,432,738	3,460	7,335,249	610,234	142,862	45,478
				Gasoline service stations				
Total	1972	8,919	1,481,565	7,588	1,417,276	132,880	32,304	33,524
	1977	6,572	2,590,860	5,682	2,509,291	161,320	40,310	30,309
				Apparel and accessory stores				
Women's clothing,	1972	1,466	483,980	1,258	479,353	67,067	15,849	15,699
specialty, furriers	1977	1,666	716,921	1,479	711,578	101,237	23,516	17,216
Women's ready-to-	1972	1,116	449,242	1,010	446,229	61,877	14,628	14,569
wear stores	1977	1,410	672,123	1,295	666,510	94,748	22,071	16,251
Women's acc. and	1972	296	23,297	212	21,949	3,352	722	866
specialty stores	1977	256	44,798	184	43,068	6,489	1,445	965
Millinery stores	1972	(c)	(c)	37	2,620	445	118	123
	1977	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Corset/lingerie	1972	(c)	(c)	13	1,124	130	33	45
	1977	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

TABLE XXI-6. DETAILED STATISTICS FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

Kind of business	Year	All establishments[a]		Establishments with payroll				
		Number	Sales ($1,000)	Number	Sales ($1,000)	Payroll ($1,000) Entire year	Payroll ($1,000) First quarter	Paid employees[b] 12 March
			Apparel and accessory stores (cont.)					
Other accessory specialty stores	1972	(c)	(c)	162	18,205	2,777	621	698
	1977	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Furriers/fur shops	1972	54	11,441	36	11,175	1,838	49	264
	1977	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Men's/boy's clothing furnishing stores	1972	872	278,283	808	275,751	41,857	9,943	7,183
	1977	876	363,486	809	360,007	60,002	14,737	7,209
Family clothing stores	1972	565	122,829	395	119,318	16,513	3,609	3,838
	1977	608	240,129	410	234,461	29,439	7,568	5,639
Shoe stores	1972	995	177,253	908	174,969	25,736	6,010	5,156
	1977	1,037	254,746	933	250,834	36,516	8,137	5,032
Men's	1972	(c)	(c)	134	25,530	3,246	743	547
	1977	(c)	(c)	136	38,313	5,131	1,193	523
Women's	1972	(c)	(c)	172	37,921	6,250	1,491	1,293
	1977	(c)	(c)	187	58,696	9,407	2,021	1,310
Children's	1972	(c)	(c)	27	3,724	625	129	99
	1977	(c)	(c)	34	6,718	1,236	299	171
Family	1972	(c)	(c)	575	107,794	15,615	3,647	3,217
	1977	(c)	(c)	576	147,107	20,742	4,624	3,028
Other apparel and accessory stores	1972	309	23,886	217	21,968	3,443	828	849
	1977	462	66,593	351	63,576	10,320	2,483	1,901
Children's/infants' wear stores	1972	(c)	(c)	109	12,879	1,770	442	489
	1977	182	33,874	166	33,331	4,719	1,167	1,028
Misc. apparel and accessory stores	1972	(c)	(c)	108	9,089	1,673	386	360
	1977	280	32,719	185	30,245	5,601	1,316	873
Total	1972	4,207	1,086,231	3,586	1,071,359	154,616	36,239	32,725
	1977	4,649	1,641,875	3,982	1,620,456	237,514	56,441	36,997
			Furniture, home furnishings, and equipment stores					
Furniture and home furnishings stores	1972	2,410	563,539	1,690	543,868	87,059	19,858	11,695
	1977	2,872	816,109	1,754	780,108	123,430	27,902	11,937
Furniture stores	1972	1,179	382,833	945	374,847	61,286	14,000	7,919
	1977	1,221	529,548	945	516,997	82,561	18,701	7,515
Home furnishings	1972	1,231	180,706	745	169,021	25,773	5,858	3,776
	1977	1,651	286,561	809	263,111	40,869	9,201	4,422
Floor covering	1972	(c)	(c)	425	120,813	17,798	4,010	2,209
	1977	711	201,453	432	190,755	28,551	6,960	2,393

TABLE XXI-6. DETAILED STATISTICS FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

		All establishments[a]		Establishments with payroll				
						Payroll ($1,000)		
Kind of Business	Year	Number	Sales ($1,000)	Number	Sales ($1,000)	Entire year	First quarter	Paid employees 12 March[b]
Furniture, home furnishings, and equipment stores (cont.)								
Drapery, curtain	1972	(c)	(c)	178	24,134	4,282	1,011	839
upholstery stores	1977	420	37,597	177	33,275	5,956	1,478	999
Misc. home	1972	(c)	(c)	142	24,074	3,693	837	728
furnishing stores	1977	520	47,511	200	39,081	6,362	1,363	1,030
Household appliance	1972	819	222,177	622	215,310	24,149	5,594	3,344
stores	1977	616	273,853	464	265,593	28,063	6,535	2,898
Radio, television	1972	1,290	222,952	843	209,944	27,998	7,002	4,551
and music stores	1977	1,509	401,120	953	382,838	46,889	11,375	5,502
Radio/television	1972	(c)	(c)	514	136,740	16,439	4,014	2,532
	1977	965	287,501	590	276,173	32,760	7,783	3,430
Music stores	1972	(c)	(c)	329	73,204	11,559	2,988	2,019
	1977	544	113,619	363	106,665	14,129	3,592	2,072
Record shops	1972	(c)	(c)	93	14,586	1,552	385	349
	1977	(c)	(c)	144	41,482	4,280	1,005	655
Musical instrument	1972	(c)	(c)	236	58,618	10,007	2,603	1,670
	1977	(c)	(c)	219	65,183	9,849	2,587	1,417
Total	1972	4,519	1,008,668	3,155	969,122	139,206	32,454	19,590
	1977	5,042	1,491,082	3,171	1,428,539	198,382	45,812	20,337
Eating and drinking places								
Eating places	1972	8,998	1,223,085	8,026	1,198,109	311,093	70,112	97,154
	1977	9,594	2,247,666	8,849	2,220,260	567,499	130,378	142,198
Restaurants and	1972	(c)	(c)	4,136	651,436	176,886	39,949	55,618
lunchrooms	1977	(c)	(c)	4,438	1,197,242	325,100	75,239	81,720
Cafeterias	1972	(c)	(c)	284	60,371	16,283	3,968	5,510
	1977	(c)	(c)	198	58,880	14,893	3,546	3,796
Refreshment places	1972	(c)	(c)	2,893	367.502	81,371	17,409	26,853
	1977	(c)	(c)	3,315	774,674	170,744	38,527	45,694
Other eating places	1972	(c)	(c)	713	118,800	36,553	8,786	9,173
	1977	(c)	(c)	898	189,464	56,762	13,066	10,988
Drinking places	1972	4,990	386.828	4,356	365,892	67,314	15,926	20,136
(alcoholic bev.)	1977	4,242	448,331	3,737	427,126	80,494	19,633	19,552
Total	1972	13,988	1,609,913	12,382	1,564,001	378,407	86,038	117,290
	1977	13,336	2,695,997	12,586	2,647,386	647,993	150,011	161,750

TABLE XXI-6. DETAILED STATISTICS FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

Kind of business	Year	All establishments[a]		Establishments with payroll				
						Payroll ($1,000)		Paid employees 12 March[b]
		Number	Sales ($1,000)	Number	Sales ($1,000)	Entire year	First quarter	
				Drug stores and proprietary stores				
Drug stores	1972	(c)	(c)	1,762	709,377	92,877	22,605	18,956
	1977	(c)	(c)	1,700	1,000,554	132,358	32,147	17,963
Proprietary stores	1972	(c)	(c)	127	38,094	3,352	814	828
	1977	(c)	(c)	123	44,232	3,797	899	674
Total	1972	1,970	751,939	1,889	747,471	96,229	23,419	19,784
	1977	1,899	1,050,132	1,823	1,044,786	136,155	33,046	18,657
				Miscellaneous retail stores				
Liquor stores	1972	775	189,793	645	180,244	9,471	2,263	2,578
	1977	941	278,188	778	258,627	17,467	4,107	3,210
Used mdse. stores	1972	1,017	47,216	375	36,449	6,794	1,557	1,345
	1977	1,469	84,854	439	65,351	12,780	3,047	1,876
Nonstore retailers	1972	7,032	400,147	716	305,782	46,000	10,973	7,627
	1977	1,177[a]	472,143	744	456,689	69,956	16,968	8,095
Mail-order houses	1972	231	90,033	171	88,725	8,680	2,067	1,998
	1977	295	143,538	189	139,951	13,941	3,138	2,102
Automatic mdse. machine operators	1972	568	159,961	253	151,010	24,679	5,999	3,452
	1977	617	208,358	290	196,491	34,129	8,436	3,377
Direct selling	1972	6,233	150,153	292	66,047	12,641	2,907	2,177
	1977	265[a]	120,247	265	120,247	21,886	5,394	2,616
Fuel and ice dealers	1972	464	116,519	364	113,523	16,124	4,370	2,323
	1977	551	250,703	402	240,507	23,068	6,051	2,440
Fuel oil	1972	(c)	(c)	166	61,510	7,103	2,027	1,011
	1977	264	142,610	198	135,318	10,555	2,711	1,162
Liquefied petroleum bottled gas	1972	(c)	(c)	154	46,739	8,269	2,170	1,177
	1977	215	102,907	181	101,840	12,235	3,267	1,230
Fuel and ice, N.E.C.	1972	(c)	(c)	44	5,274	752	173	135
	1977	72	5,186	23	3,349	278	73	48
Florists	1972	878	69,010	613	63,662	13,065	3,021	2,896
	1977	1,023	100,234	698	90,800	19,662	4,485	3,467
Cigar stores/stands	1972	142	12,313	104	11,136	1,507	343	429
	1977	100	16,683	69	14,784	1,455	390	307

TABLE XXI-6. DETAILED STATISTICS FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

Kind of business	Year	All establishments[a] Number	All establishments[a] Sales ($1,000)	Establishments with payroll Number	Establishments with payroll Sales ($1,000)	Payroll ($1,000) Entire year	Payroll ($1,000) First quarter	Paid employees 12 March[b]
Miscellaneous retail stores (cont.)								
Misc. shopping goods	1972	4,793	511,314	2,631	468,506	62,738	14,127	13,403
stores	1977	6,370	871,308	3,274	798,196	112,502	26,266	17,767
Sporting goods and	1972	1,215	146,755	637	130,874	15,094	3,265	2,631
bicycle shops	1977	1,545	237,380	784	212,256	27,019	5,946	3,377
General line	1972	(c)	(c)	443	89,773	10,676	2,411	1,855
sporting goods	1977	(c)	(c)	387	127,406	16,513	3,792	2,038
Specialty line	1972	(c)	(c)	194	41,101	4,418	854	776
sporting goods	1977	(c)	(c)	397	84,850	10,506	2,154	1,339
Book stores	1972	286	38,032	189	35,600	4,797	1,160	1,173
	1977	457	81,164	295	77,086	9,255	2,222	1,565
Stationery stores	1972	171	21,153	141	20,450	3,381	817	825
	1977	171	33,881	125	32,649	5,492	1,299	782
Jewelry stores	1972	819	123,210	541	116,581	18,163	4,151	3,249
	1977	1,093	203,247	663	190,550	32,483	7,820	4,105
Hobby, toy, game	1972	512	38,682	167	33,404	3,600	731	727
shops	1977	835	86,386	270	77,160	8,826	2,045	1,822
Camera and photo	1972	132	35,702	104	34,753	4,174	996	733
supply stores	1977	163	46,370	118	44,399	5,477	1,3[illegible]4	711
Gift, novelty, and	1972	910	43,322	481	36,656	5,098	1,022	1,416
souvenir shops	1977	1,261	94,063	615	81,498	12,427	2,798	2,485
Luggage/leather	1972	58	8,732	46	8,596	1,403	327	279
goods	1977	80	12,137	54	11,702	1,901	462	293
Sewing, needlework,	1972	690	55,726	325	51,592	7,028	1,638	2,370
piece goods stores	1977	765	76,680	350	70,896	9,622	2,350	2,627
Other misc. retail	1972	3,508	152,873	767	91,555	16,913	3,883	2,809
stores	1977	4,034	247,124	960	156,975	29,280	6,661	3,380
News dealers and	1972	(c)	(c)	65	7,253	743	177	209
newstands	1977	309	16,143	39	9,942	1,011	239	200
Pet shops	1972	(c)	(c)	77	6,997	1,070	259	277
	1977	(c)	(c)	122	15,368	2,103	552	426
Typewriter stores	1972	(c)	(c)	33	5,214	1,106	259	196
	1977	(c)	(c)	27	4,968	1,245	292	116

TABLE XXI-6. DETAILED STATISTICS FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

		All establishments[a]		Establishments with payroll				
						Payroll ($1,000)		
Kind of business	Year	Number	Sales ($1,000)	Number	Sales ($1,000)	Entire year	First quarter	Paid employees 12 March[b]
		Miscellaneous retail stores (cont.)						
Optical goods stores	1972	(c)	(c)	197	23,691	6,040	1,498	766
	1977	(c)	(c)	312	50,251	11,701	2,809	1,093
Other retail stores, N.E.C.	1972	(c)	(c)	395	48,400	7,954	1,690	1,361
	1977	(c)	(c)	499	86,388	14,231	3,008	1,745
Total	1972	18,609	1,499,185	6,215	1,270,857	172,612	40,537	33,410
	1977	15,974	2,337,380	7,403	2,091,871	287,181	68,214	40,742
Total retail trade	1972	71,795	20,630,308	49,111	19,993,249	2,383,330	553,230	461,845
	1977	67,059	31,912,356	48,431	31,089,750	3,720,097	850,313	523,549

SOURCE: Bureau of the Census, *U.S. Census of Retail Trade, 1972, Area Series, Michigan* (Washington, D.C.: 1974), RC72-A-23, Table 1; and Bureau of the Census, *Census of Retail Trade, 1977, Area Series, Michigan* (Washington, D.C.: 1979), RC77-A-23, Table 1.

a. Excludes direct selling establishments without payroll in 1977.

b. Week including 12 March.

c. Data not provided because establishments with no payroll are classified only at the next broader kind-of-business level.

N.E.C.: not elsewhere classified.

n.a.: not available.

TABLE XXI-7. SUMMARY STATISTICS FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN, BY COUNTY: 1972 AND 1977

County	Year	All establishments[a] Number	All establishments[a] Sales ($1,000)	Establishments with payroll Number	Establishments with payroll Sales ($1,000)	Payroll ($1,000) Entire year	Payroll ($1,000) First quarter	Paid employees 12 March[b]
Alcona	1972	103	13,237	63	11,940	1,001	208	183
	1977	104	21,152	68	18,851	1,727	383	281
Alger	1972	118	13,888	88	13,219	1,251	270	319
	1977	126	23,515	85	22,114	2,099	488	398
Allegan	1972	623	117,669	394	111,481	11,341	2,521	2,387
	1977	589	172,398	372	163,661	15,818	3,565	2,490
Alpena	1972	352	83,744	258	81,129	8,921	2,065	1,754
	1977	361	120,187	260	115,800	12,851	2,948	1,887
Antrim	1972	179	23,867	117	22,354	2,462	482	438
	1977	183	39,130	124	36,137	3,674	760	522
Arenac	1972	181	26,432	110	24,144	2,293	494	491
	1977	170	41,350	104	37,810	3,445	778	768
Baraga	1972	95	13,469	69	12,867	1,169	239	260
	1977	91	25,950	58	24,543	2,069	463	407
Barry	1972	305	47,784	189	45,189	4,765	1,115	999
	1977	262	70,972	169	67,273	6,885	1,569	1,095
Bay	1972	1,056	275,360	707	265,767	29,812	6,891	6,114
	1977	948	423,811	706	412,598	46,888	10,732	6,842
Benzie	1972	151	19,404	105	17,994	1,837	355	382
	1977	158	35,188	110	33,007	3,289	672	469
Berrien	1972	1,642	381,518	1,086	366,673	43,005	9,844	9,203
	1977	1,493	601,021	1,023	582,367	68,036	15,621	10,327
Branch	1972	368	77,758	238	74,898	7,594	1,757	1,554
	1977	373	112,248	245	107,364	10,943	2,456	1,714
Calhoun	1972	1,273	326,609	886	317,329	39,741	9,165	7,959
	1977	1,096	458,717	822	449,307	60,047	13,046	8,590
Cass	1972	357	57,751	226	53,898	6,034	1,359	1,387
	1977	323	85,190	206	80,655	8,959	1,968	1,311
Charlevoix	1972	252	33,605	174	31,579	3,396	724	701
	1977	245	57,057	168	54,108	5,758	1,241	848
Cheboygan	1972	292	51,656	220	49,363	5,469	977	1,041
	1977	300	81,488	244	79,195	9,907	1,860	1,178

TABLE XXI-7. SUMMARY STATISTICS FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN, BY COUNTY: 1972 AND 1977 (cont.)

		All establishments[a]		Establishments with payroll				
						Payroll ($1,000)		Paid employees 12 March[b]
County	Year	Number	Sales ($1,000)	Number	Sales ($1,000)	Entire year	First quarter	
Chippewa	1972	390	66,714	252	61,370	6,890	1,467	1,405
	1977	371	96,034	256	90,243	10,349	2,305	1,551
Clare	1972	290	42,901	203	40,334	4,315	873	863
	1977	264	70,763	176	66,674	6,910	1,677	1,046
Clinton	1972	351	74,127	225	70,705	6,677	1,524	1,341
	1977	310	114,306	213	111,308	11,100	2,689	1,605
Crawford	1972	112	19,832	84	18,691	1,814	382	382
	1977	121	38,257	86	36,949	3,495	741	546
Delta	1972	402	84,832	296	81,761	8,244	1,911	1,892
	1977	417	133,249	301	127,947	12,866	2,997	2,033
Dickinson	1972	300	61,058	211	58,652	6,041	1,389	1,324
	1977	303	96,930	214	94,070	10,289	2,432	1,624
Eaton	1972	651	190,601	436	186,482	19,693	4,573	4,230
	1977	642	337,887	463	330,941	40,462	8,686	5,594
Emmet	1972	361	73,267	274	71,252	8,801	1,888	1,618
	1977	380	120,378	287	116,883	14,600	3,195	2,081
Genesee	1972	3,358	1,108,533	2,378	1,084,339	129,485	29,972	24,499
	1977	2,993	1,817,915	2,305	1,789,955	208,467	46,056	27,612
Gladwin	1972	161	25,620	107	23,734	2,198	418	476
	1977	160	45,064	114	42,533	4,097	911	663
Gogebic	1972	274	43,688	187	41,340	4,180	983	1,064
	1977	272	60,740	174	57,652	5,981	1,502	1,141
Grand Traverse	1972	553	149,747	386	145,919	18,243	3,959	3,201
	1977	626	235,242	453	228,152	29,767	6,872	4,210
Gratiot	1972	416	83,581	265	79,596	8,479	1,986	1,821
	1977	365	115,007	256	110,234	12,512	2,930	1,944
Hillsdale	1972	372	60,864	203	55,457	6,314	1,464	1,335
	1977	345	96,388	204	89,830	9,232	2,108	1,382
Houghton	1972	398	66,023	260	62,189	6,209	1,397	1,460
	1977	375	100,858	256	95,464	10,336	2,364	1,796
Huron	1972	463	68,640	296	53,503	6,131	1,443	1,346
	1977	444	101,580	286	94,370	9,515	2,221	1,567

TABLE XXI-7. SUMMARY STATISTICS FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN, BY COUNTY: 1972 AND 1977 (cont.)

County	Year	All establishments[a]		Establishments with payroll				
						Payroll ($1,000)		
		Number	Sales ($1,000)	Number	Sales ($1,000)	Entire year	First quarter	Paid employees 12 March[b]
Ingham	1972	1,959	666,457	1,413	654,545	83,278	19,227	17,145
	1977	1,775	1,000,941	1,321	984,425	125,203	27,689	18,172
Ionia	1972	432	79,443	282	75,845	7,406	1,718	1,628
	1977	367	139,309	266	134,797	14,679	2,904	2,087
Iosco	1972	366	56,636	260	53,376	5,794	1,197	1,149
	1977	348	83,191	235	79,553	8,664	1,838	1,276
Iron	1972	202	27,929	141	26,520	2,511	561	644
	1977	208	45,716	127	43,538	3,705	862	767
Isabella	1972	326	82,019	240	79,941	9,348	2,096	2,040
	1977	369	146,264	281	142,021	16,674	3,837	2,805
Jackson	1972	1,209	320,205	847	311,575	38,126	9,140	7,546
	1977	1,015	482,474	756	471,943	62,152	13,755	8,686
Kalamazoo	1972	1,556	479,216	1,100	468,747	61,159	14,427	12,861
	1977	1,500	798,370	1,163	786,336	105,752	23,497	15,278
Kalkaska	1972	89	12,770	57	11,391	1,206	213	225
	1977	97	33,591	61	31,423	3,173	687	450
Kent	1972	3,536	1,119,875	2,390	1,090,137	129,982	30,537	27,487
	1977	3,172	1,733,723	2,272	1,696,483	222,748	49,339	32,005
Keweenaw	1972	44	1,926	23	1,507	155	21	26
	1977	45	3,688	26	2,964	335	53	49
Lake	1972	97	8,185	54	6,719	757	136	201
	1977	98	12,796	58	10,889	1,171	249	222
Lapeer	1972	368	92,160	247	89,034	8,173	1,889	1,737
	1977	374	159,360	268	153,644	14,945	3,555	2,273
Leelanau	1972	157	17,530	103	16,505	1,695	305	280
	1977	179	26,693	114	24,518	2,560	538	416
Lenawee	1972	876	207,465	597	200,169	22,393	5,090	4,603
	1977	763	303,537	546	294,213	30,921	6,957	4,698
Livingston	1972	480	110,877	301	105,193	11,347	2,553	2,207
	1977	557	225,970	381	218,083	22,643	5,102	3,425
Luce	1972	68	12,495	50	12,219	1,169	259	226
	1977	78	22,409	59	21,468	2,043	485	304

TABLE XXI-7. SUMMARY STATISTICS FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN, BY COUNTY: 1972 AND 1977 (cont.)

County	Year	All establishments[a] Number	All establishments[a] Sales ($1,000)	Establishments with payroll Number	Establishments with payroll Sales ($1,000)	Payroll ($1,000) Entire year	Payroll ($1,000) First quarter	Paid employees 12 March[b]
Mackinac	1972	228	23,846	168	22,560	2,495	367	393
	1977	219	35,823	172	33,767	4,053	746	550
Macomb	1972	3,999	1,526,197	2,743	1,489,171	168,274	39,289	31,506
	1977	4,224	2,702,797	3,093	2,648,380	300,874	69,983	40,639
Manistee	1972	271	42,184	197	40,521	4,148	901	910
	1977	250	63,081	175	60,500	6,224	1,364	998
Marquette	1972	535	110,761	390	106,167	12,252	2,832	2,959
	1977	597	212,969	457	205,112	23,975	5,456	4,206
Mason	1972	283	59,145	197	57,087	5,696	1,254	1,203
	1977	257	81,970	183	78,422	8,335	1,755	1,412
Mecosta	1972	279	52,954	174	49,714	5,645	1,316	1,272
	1977	207	90,783	200	86,339	9,588	2,230	1,602
Menominee	1972	254	36,657	160	34,020	3,249	737	770
	1977	234	64,207	140	59,177	5,680	1,344	1,062
Midland	1972	482	137,811	346	135,161	15,242	3,543	2,887
	1977	467	212,662	339	207,995	23,756	5,643	3,336
Missaukee	1972	91	11,032	51	9,818	800	177	213
	1977	80	18,644	55	17,521	1,538	321	253
Monroe	1972	813	198,519	523	191,006	21,846	5,156	4,385
	1977	713	331,270	516	319,983	33,304	7,590	4,562
Montcalm	1972	448	93,328	285	89,412	8,605	1,936	1,784
	1977	339	146,166	274	139,938	14,832	3,036	2,041
Montmorency	1972	105	11,417	62	9,972	1,035	210	228
	1977	101	21,599	65	19,342	1,943	430	301
Muskegon	1972	1,182	333,467	829	325,052	36,455	8,152	7,556
	1977	1,109	475,025	808	466,523	57,378	12,258	8,261
Newaygo	1972	307	44,185	204	41,414	4,142	862	895
	1977	253	67,034	187	64,170	6,340	1,408	990
Oakland	1972	7,257	2,696,655	4,682	2,620,103	323,886	75,650	58,201
	1977	7,741	4,528,678	5,520	4,433,867	544,196	126,453	73,939
Oceana	1972	213	31,073	137	28,608	2,563	513	581
	1977	209	44,700	134	41,588	4,113	877	672

TABLE XXI-7. SUMMARY STATISTICS FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN, BY COUNTY: 1972 AND 1977 (cont.)

County	Year	All establishments[a] Number	All establishments[a] Sales ($1,000)	Establishments with payroll Number	Establishments with payroll Sales ($1,000)	Payroll ($1,000) Entire year	Payroll ($1,000) First quarter	Paid employees 12 March[b]
Ogemaw	1972	178	34,579	122	32,725	3,679	784	676
	1977	198	55,396	136	52,537	5,211	1,173	736
Ontonagon	1972	132	19,750	86	18,207	1,702	401	409
	1977	124	27,758	73	24,617	2,253	520	451
Osceola	1972	181	23,645	115	21,358	2,234	503	503
	1977	193	36,530	123	32,646	3,092	688	502
Oscoda	1972	74	7,415	49	6,592	721	155	175
	1977	86	13,550	56	12,001	1,351	322	268
Otsego	1972	167	36,092	122	34,404	4,187	887	773
	1977	204	63,476	144	60,154	6,765	1,468	1,110
Ottawa	1972	940	243,085	651	235,237	24,450	5,644	5,517
	1977	1,003	408,594	699	394,810	49,545	10,254	7,315
Presque Isle	1972	162	24,371	110	22,703	2,021	432	442
	1977	152	35,706	100	32,400	3,110	706	518
Roscommon	1972	312	37,873	211	35,168	3,904	729	706
	1977	305	61,482	202	57,190	6,462	1,301	966
Saginaw	1972	1,651	516,065	1,184	503,223	62,724	14,362	12,148
	1977	1,637	848,317	1,239	831,264	102,468	23,730	14,895
St. Clair	1972	1,120	257,497	741	246,529	28,730	6,643	5,705
	1977	1,008	394,258	685	379,301	45,474	10,420	6,804
St. Joseph	1972	527	102,634	345	97,124	10,590	2,451	2,304
	1977	498	160,341	342	154,621	16,176	3,789	2,408
Sanilac	1972	394	61,666	251	57,093	5,002	1,094	1,071
	1977	402	95,154	239	86,277	7,851	1,776	1,145
Schoolcraft	1972	140	17,475	96	16,176	1,514	305	340
	1977	129	26,982	95	25,459	2,611	570	430
Shiawassee	1972	544	121,260	355	115,610	12,186	2,948	2,616
	1977	504	203,312	358	197,371	19,917	4,852	3,022
Tuscola	1972	491	84,583	329	79,963	7,694	1,713	1,548
	1977	470	128,591	312	121,225	11,798	2,832	1,834
Van Buren	1972	533	105,846	345	100,822	10,350	2,306	2,114
	1977	522	159,370	320	152,042	15,700	3,444	2,206

TABLE XXI-7. SUMMARY STATISTICS FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN, BY COUNTY: 1972 AND 1977 (cont.)

		All establishments[a]		Establishments with payroll				
						Payroll ($1,000)		
County	Year	Number	Sales ($1,000)	Number	Sales ($1,000)	Entire year	First quarter	Paid employees 12 March[b]
Washtenaw	1972	1,639	599,139	1,187	587,377	75,450	17,852	14,106
	1977	1,671	981,126	1,242	962,364	123,545	27,488	17,148
Wayne	1972	17,629	5,787,313	12,364	5,623,985	705,374	166,295	130,334
	1977	14,373	7,834,951	10,804	7,661,296	940,110	222,140	126,982
Wexford	1972	270	61,822	202	59,896	6,181	1,367	1,210
	1977	275	109,048	202	105,258	10,788	2,364	1,550
Total	1972	71,795	20,630,308	49,111	19,993,249	2,383,330	553,230	461,845
	1977	67,059	31,912,356	48,431	31,089,750	3,720,097	850,313	523,549

SOURCE: Bureau of the Census, U.S. Census of Retail Trade, 1972, Area Series, Michigan (Washington, D.C.: 1974), RC72-A-23, Table 6; and Bureau of the Census, 1977 Census of Retail Trade, Area Series, Michigan (Washington, D.C.: 1979), RC77-A-23, Table 7.

a. In 1977, excludes direct selling establishments without payroll. In Michigan there were 5,941 such establishments, with $84,106,000 sales in 1972.

b. Week including 12 March.

TABLE XXI-8. SELECTED DATA FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN CITIES AND VILLAGES OF 2,500 INHABITANTS OR MORE: 1972 AND 1977

		All establishments[a]		Establishments with payroll				
						Payroll ($1,000)		
City	Year	Number	Sales ($1,000)	Number	Sales ($1,000)	Entire year	First quarter	Paid employees 12 March[b]
Adrian	1972	297	93,511	235	91,721	11,545	2,671	2,469
	1977	237	126,558	189	124,898	15,039	3,408	2,376
Albion	1972	124	36,438	107	36,038	3,891	853	744
	1977	104	37,508	87	37,026	4,349	1,035	710
Algonac	1972	52	11,991	37	11,397	1,368	304	269
	1977	50	15,662	33	14,966	1,823	414	270
Allegan	1972	98	24,795	67	24,027	2,335	588	477
	1977	101	39,324	66	37,901	3,467	814	505
Allen Park	1972	262	70,034	192	68,044	7,885	1,878	1,890
	1977	221	97,285	167	94,301	11,861	2,899	2,142
Alma	1972	165	47,750	120	46,262	5,068	1,182	1,008
	1977	146	61,909	116	60,179	7,093	1,634	1,062
Alpena	1972	258	69,396	216	68,273	7,737	1,799	1,554
	1977	254	100,442	197	97,941	11,264	2,522	1,657
Ann Arbor	1972	728	280,654	544	276,013	39,084	9,357	7,360
	1977	824	499,241	646	493,478	66,803	15,269	9,844
Bad Axe	1972	84	18,485	65	17,916	1,952	438	387
	1977	69	29,107	54	28,142	3,150	711	443
Battle Creek	1972	536	171,380	377	168,131	21,856	5,065	4,110
	1977	453	197,715	336	194,235	25,398	5,971	3,494
Bay City	1972	579	140,825	415	136,586	17,098	4,042	3,521
	1977	506	214,201	401	208,502	25,008	5,887	3,705
Belding	1972	42	9,670	30	9,351	1,000	264	202
	1977	44	22,446	38	22,210	2,450	511	381
Benton Harbor	1972	336	103,791	219	100,758	11,984	2,729	2,248
	1977	206	104,068	135	101,518	11,893	2,834	1,775
Berkley	1972	154	25,802	102	23,993	3,610	843	819
	1977	138	48,158	107	46,398	7,347	1,698	1,158
Bessemer	1972	39	7,138	27	6,790	595	137	155
	1977	44	11,537	31	11,165	1,028	253	216
Beverly Hills	1972	77	15,179	32	14,065	2,088	468	[illegible]
	1977	50	14,003	19	12,837	1,938	471	221

TABLE XXI-8. SELECTED DATA FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN CITIES AND VILLAGES OF 2,500 INHABITANTS OR MORE: 1972 AND 1977 (cont.)

City	Year	All establishments[a]		Establishments with payroll				
						Payroll ($1,000)		Paid employees 12 March[b]
		Number	Sales ($1,000)	Number	Sales ($1,000)	Entire year	First quarter	
Big Rapids	1972	133	32,264	100	31,489	3,716	852	854
	1977	126	47,270	104	46,245	5,749	1,391	1,002
Birmingham	1972	318	161,127	240	158,657	22,487	5,452	3,707
	1977	392	211,805	316	208,856	28,721	6,874	3,902
Blissfield	1972	61	11,546	43	11,116	1,149	275	283
	1977	51	16,447	42	15,694	1,343	280	252
Bloomfield Hills	1972	92	22,219	62	21,152	3,074	746	716
	1977	62	24,442	43	23,639	3,629	822	526
Boyne City	1972	66	9,757	47	9,300	903	192	185
	1977	72	18,115	56	17,326	1,844	412	290
Buchanan	1972	66	17,360	49	16,956	1,648	393	307
	1977	52	19,787	39	19,549	1,903	439	265
Burton	1972	114	33,226	66	31,976	3,689	821	789
	1977	217	190,694	178	189,547	26,287	5,003	3,191
Cadillac	1972	191	50,703	153	49,522	5,303	1,170	1,014
	1977	181	73,337	142	71,900	7,486	1,645	1,043
Caro	1972	93	21,156	78	20,842	2,133	481	439
	1977	97	36,276	79	35,455	3,808	874	543
Center Line	1972	72	52,389	60	51,969	7,250	1,275	775
	1977	80	93,756	61	92,580	8,302	1,840	877
Charlevoix	1972	105	15,138	77	14,333	1,591	325	309
	1977	100	26,424	68	25,633	2,799	615	396
Charlotte	1972	146	35,582	110	35,078	3,740	909	757
	1977	137	52,563	104	51,445	5,775	1,422	953
Cheboygan	1972	131	29,667	101	28,785	2,839	608	613
	1977	138	41,935	113	40,508	4,575	924	618
Chelsea	1972	65	18,880	49	18,538	2,004	462	366
	1977	62	38,684	52	37,589	3,660	932	456
Chesaning	1972	68	14,956	45	14,361	1,303	296	285
	1977	51	29,046	36	28,581	2,303	509	339
Clare	1972	116	20,881	87	19,920	2,299	487	435
	1977	103	39,691	76	38,721	4,013	1,028	556

TABLE XXI-8. SELECTED DATA FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN CITIES AND VILLAGES OF 2,500 INHABITANTS OR MORE: 1972 AND 1977 (cont.)

		All establishments[a]		Establishments with payroll				
						Payroll ($1,000)		
City	Year	Number	Sales ($1,000)	Number	Sales ($1,000)	Entire year	First quarter	Paid employees 12 March[b]
Clawson	1972	124	38,583	80	37,508	5,259	1,270	1,079
	1977	116	47,347	86	46,334	6,493	1,577	1,018
Coldwater	1972	162	42,789	126	42,046	4,493	1,012	905
	1977	184	66,835	130	64,963	7,116	1,559	1,073
Corunna	1972	42	5,869	18	4,933	396	109	108
	1977	39	22,092	22	21,081	2,368	579	341
Davison	1972	88	24,978	58	24,555	2,668	611	470
	1977	64	40,965	49	40,538	3,765	882	485
Dearborn	1972	920	421,498	678	414,113	54,052	12,773	9,687
	1977	908	778,779	734	770,119	93,367	21,548	12,196
Dearborn Heights	1972	422	108,539	292	104,977	12,529	2,932	2,682
	1977	415	173,825	311	167,662	20,471	4,941	3,449
Detroit	1972	9,768	2,724,228	6,945	2,631,696	343,003	82,188	62,811
	1977	6.914	2,968,783	5,142	2,878,924	357,541	86,842	48,457
Dowagiac	1972	145	23,950	92	22,081	2,606	562	653
	1977	145	35,669	90	33,301	3,795	791	495
Durand	1972	53	9,582	36	9,140	933	235	183
	1977	63	32,305	46	31,813	2,577	558	350
East Detroit	1972	305	101,930	207	98,821	10,758	2,599	2,085
	1977	290	206,395	213	201,410	18,969	4,563	2,400
East Grand Rapids	1972	69	13,243	37	12,461	1,685	435	383
	1977	47	18,423	30	17,685	2,546	576	442
East Lansing	1972	231	53,753	164	52,476	7,449	1,775	1,902
	1977	202	97,140	158	95,829	13,558	3,167	2,698
Eaton Rapids	1972	95	16,057	61	15,370	1,665	379	360
	1977	69	25,335	47	24,650	2,326	501	319
Ecorse	1972	117	18,413	83	17,138	2,459	597	540
	1977	92	21,337	63	20,125	3,028	740	457
Escanaba	1972	233	62,804	192	61,533	6,576	1,518	1,448
	1977	234	104,266	190	102,340	10,693	2,524	1,661
Essexville	1972	38	2,752	27	2,615	252	62	86
	1977	63	12,265	48	11,938	1,414	348	332

TABLE XXI-8. SELECTED DATA FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN CITIES AND VILLAGES OF 2,500 INHABITANTS OR MORE: 1972 AND 1977 (cont.)

City	Year	All establishments[a]		Establishments with payroll				
						Payroll ($1,000)		
		Number	Sales ($1,000)	Number	Sales ($1,000)	Entire year	First quarter	Paid employees 12 March[b]
Farmington	1972	224	61,787	153	60,187	7,758	1,826	1,449
	1977	199	118,770	151	116,902	13,413	3,210	1,724
Fenton	1972	149	45,228	91	43,886	4,451	1,008	731
	1977	143	96,724	103	95,029	9,129	2,009	1,135
Ferndale	1972	272	109,144	202	106,998	12,589	2,915	1,877
	1977	220	133,478	162	130,383	13,112	3,334	1,463
Flat Rock	1972	67	20,953	53	20,653	2,283	504	417
	1977	71	30,072	54	29,379	3,410	791	526
Flint	1972	1,627	555,200	1,269	545,446	68,341	16,291	13,129
	1977	1,421	688,143	1,147	676,353	82,033	18,918	11,450
Flushing	1972	74	22,642	50	22,273	2,282	555	343
	1977	104	49,584	71	48,207	4,847	1,263	626
Frankenmuth	1972	56	21,290	42	20,673	3,328	677	834
	1977	79	46,755	64	46,059	5,952	1,620	960
Franklin	1972	28	2,186	12	1,413	204	49	56
	1977	39	6,698	28	6,401	1,002	211	163
Fraser	1972	111	24,500	67	23,590	2,897	738	577
	1977	110	34,713	65	31,949	3,934	972	598
Fremont	1972	111	23,023	73	22,134	2,327	490	401
	1977	91	32,144	71	31,232	3,114	703	426
Garden City	1972	220	85,744	150	82,984	8,414	1,830	1,443
	1977	201	130,985	148	128,519	14,389	3,387	1,938
Gaylord	1972	102	26,003	87	25,501	3,425	728	633
	1977	129	48,227	101	46,765	5,128	1,085	848
Gibraltar	1972	15	1,353	9	(D)	(D)	(D)	(D)
	1977	15	(D)	9	(D)	(D)	(D)	(D)
Gladstone	1972	85	12,482	54	11,647	1,036	252	292
	1977	78	16,282	54	14,897	1,347	301	220
Grand Blanc	1972	90	34,065	66	33,569	4,003	904	856
	1977	97	46,954	64	45,866	6,273	1,412	854
Grand Haven	1972	183	49,365	133	48,065	5,514	1,289	1,214
	1977	171	76,007	125	73,531	10,110	2,070	1,339

TABLE XXI-8. SELECTED DATA FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN CITIES AND VILLAGES OF 2,500 INHABITANTS OR MORE: 1972 AND 1977 (cont.)

		All establishments[a]		Establishments with payroll				
						Payroll ($1,000)		
City	Year	Number	Sales ($1,000)	Number	Sales ($1,000)	Entire year	First quarter	Paid employees 12 March[b]
Grand Ledge	1972	87	10,232	48	9,183	1,203	283	284
	1977	100	32,001	57	29,904	2,956	688	423
Grand Rapids	1972	1,695	533,190	1,177	519,423	65,991	15,784	13,768
	1977	1,512	756,703	1,108	739,445	103,040	23,589	15,104
Grandville	1972	109	33,611	64	32,633	3,256	687	645
	1977	95	64,682	66	63,353	6,964	1,543	926
Greenville	1972	105	21,737	85	21,490	2,497	591	548
	1977	94	45,837	70	44,903	6,171	1,120	733
Grosse Pointe	1972	104	37,934	63	36,664	5,576	1,346	955
	1977	93	50,474	69	49,974	7,719	1,738	1,057
Grosse Pte. Farms	1972	116	35,090	61	33,816	4,641	1,126	724
	1977	88	46,501	59	45,802	6,181	1,504	831
Grosse Pte. Park	1972	96	30,517	51	29,380	2,897	727	423
	1977	71	32,389	45	31,318	3,463	908	435
Grosse Pte. Shores	1972	39	1,172	1	(D)	(D)	(D)	(D)
	1977	6	(D)	2	(D)	(D)	(D)	(D)
Grosse Pte. Woods	1972	189	47,843	114	45,552	5,152	1,295	1,064
	1977	145	48,103	104	45,579	6,271	1,523	966
Hamtramck	1972	335	64,250	245	61,673	7,606	1,831	1,359
	1977	261	72,112	188	67,370	7,882	1,894	1,105
Hancock	1972	83	19,046	57	18,163	1,859	425	376
	1977	73	25,562	51	24,874	2,712	640	453
Harper Woods	1972	210	144,117	121	141,505	16,518	3,717	3,067
	1977	177	224,854	147	223,766	27,639	6,842	3,766
Hartford	1972	59	8,245	40	7,909	844	178	165
	1977	38	13,174	25	12,881	1,288	293	179
Hastings	1972	114	29,072	86	28,477	3,059	762	564
	1977	119	44,452	79	42,776	4,378	980	636
Hazel Park	1972	171	46,215	120	44,336	5,857	1,354	1,185
	1977	162	59,928	108	57,308	8,043	1,715	1,167
Highland Park	1972	272	104,471	203	102,494	14,261	3,264	2,420
	1977	183	112,706	145	110,031	15,656	3,697	1,919

TABLE XXI-8. SELECTED DATA FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN CITIES AND VILLAGES OF 2,500 INHABITANTS OR MORE: 1972 AND 1977 (cont.)

City	Year	All establishments[a]		Establishments with payroll				
						Payroll ($1,000)		Paid employees 12 March[b]
		Number	Sales ($1,000)	Number	Sales ($1,000)	Entire year	First quarter	
Hillsdale	1972	149	39,142	90	37,805	4,215	966	853
	1977	132	60,430	96	58,822	6,237	1,411	907
Holland	1972	397	101,330	292	98,399	10,290	2,402	2,267
	1977	350	127,739	255	124,155	13,009	3,042	2,257
Holly	1972	77	15,675	54	15,335	1,317	294	262
	1977	63	18,219	42	17,802	1,600	352	253
Houghton	1972	79	16,111	56	15,480	1,847	420	506
	1977	73	25,970	57	25,230	3,134	727	494
Howell	1972	117	35,930	83	34,802	3,530	821	664
	1977	117	52,614	86	51,861	5,218	1,167	776
Hudson	1972	64	8,876	40	8,498	797	191	212
	1977	54	12,237	37	11,534	1,150	239	178
Hudsonville	1972	28	7,108	21	6,982	660	122	102
	1977	34	9,622	17	9,163	928	192	146
Huntington Woods	1972	45	5,958	14	5,142	487	135	80
	1977	32	4,630	10	3,859	472	166	67
Inkster	1972	159	45,706	122	44,756	5,045	1,204	1,037
	1977	135	63,639	94	61,472	7,577	1,755	1,011
Ionia	1972	136	34,198	108	33,399	3,304	764	717
	1977	112	40,966	90	40,333	4,126	926	681
Iron Mountain	1972	158	37,332	110	35,970	4,057	954	859
	1977	171	52,464	129	50,984	6,368	1,526	957
Iron River	1972	99	18,234	73	17,609	1,799	404	422
	1977	104	26,968	72	26,109	2,544	581	491
Ironwood	1972	157	30,939	113	29,693	3,124	726	740
	1977	142	40,812	105	39,615	4,252	1,087	778
Ishpeming	1972	121	24,555	88	23,348	2,418	568	604
	1977	103	28,273	78	27,122	2,578	631	494
Ithaca	1972	64	10,922	41	10,279	1,034	254	205
	1977	55	15,753	41	15,142	1,684	423	255
Jackson	1972	581	174,544	435	170,750	22,655	5,627	4,395
	1977	457	202,542	368	199,420	26,951	6,531	3,947

TABLE XXI-8. SELECTED DATA FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN CITIES AND VILLAGES OF 2,500 INHABITANTS OR MORE: 1972 AND 1977 (cont.)

City	Year	All establishments[a]		Establishments with payroll				
						Payroll ($1,000)		Paid employees 12 March[b]
		Number	Sales ($1,000)	Number	Sales ($1,000)	Entire year	First quarter	
Kalamazoo	1972	783	271,735	587	266,981	37,043	8,892	7,426
	1977	713	397,155	575	392,238	53,158	12,623	8,076
Keego Harbor	1972	27	3,121	22	2,922	490	105	139
	1977	37	6,213	29	5,852	716	164	140
Kentwood	1972	131	64,685	88	63,404	8,460	1,918	1,675
	1977	180	116,380	134	114,979	16,546	3,598	2,478
Kingsford	1972	48	14,098	38	13,724	1,258	271	274
	1977	44	28,331	29	28,049	2,601	587	449
Lake Orion	1972	75	19,356	38	18,220	1,705	419	277
	1977	77	24,614	42	23,234	2,304	576	386
L'Anse	1972	51	9,522	44	9,419	854	176	178
	1977	57	19,421	43	18,839	1,572	344	327
Lansing	1972	1,161	435,929	858	429,569	55,815	12,766	10,889
	1977	984	628,893	747	615,994	76,489	17,259	10,526
Lapeer	1972	111	50,701	92	50,273	4,876	1,145	925
	1977	131	94,721	103	97,716	9,293	2,253	1,356
Lathrup Village	1972	152	45,523	80	43,533	5,962	1,278	1,042
	1977	187	76,237	122	73,591	8,566	1,644	927
Laurim	1972	30	4,407	20	4,194	412	97	84
	1977	39	11,606	29	11,162	958	233	168
Lincoln Park	1972	368	187,157	276	184,386	23,122	5,477	4,408
	1977	332	237,781	284	234,795	32,764	7,528	4,176
Livonia	1972	731	398,749	508	393,374	51,248	11,593	9,306
	1977	798	616,067	613	608,574	77,874	17,720	10,000
Lowell	1972	76	18,056	53	17,536	1,753	371	285
	1977	51	29,583	36	28,939	2,311	507	302
Ludington	1972	148	31,370	113	30,444	3,292	748	728
	1977	149	35,016	110	33,436	3,922	900	711
Madison Heights	1972	249	80,688	168	78,198	9,921	2,404	2,043
	1977	235	110,163	172	107,216	14,153	3,262	2,244
Manistee	1972	140	25,909	114	25,329	2,652	636	655
	1977	141	37,144	103	35,983	3,843	844	627

TABLE XXI-8. SELECTED DATA FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN CITIES AND VILLAGES OF 2,500 INHABITANTS OR MORE: 1972 AND 1977 (cont.)

City	Year	All establishments[a]		Establishments with payroll				
						Payroll ($1,000)		
		Number	Sales ($1,000)	Number	Sales ($1,000)	Entire year	First quarter	Paid employees 12 March[b]
Manistique	1972	95	14,993	67	14,238	1,357	270	304
	1977	82	23,440	67	22,933	2,284	508	368
Marine City	1972	81	15,582	56	14,772	1,507	366	330
	1977	79	26,262	56	24,577	2,431	546	395
Marquette	1972	242	61,327	184	59,573	7,500	1,734	1,722
	1977	281	109,182	238	107,009	13,861	3,171	2,187
Marysville	1972	45	9,170	35	8,980	879	196	178
	1977	58	18,308	43	17,996	1,875	483	397
Marshall	1972	159	28,834	109	27,436	3,227	782	800
	1977	152	47,841	111	46,785	5,251	1,170	927
Mason	1972	89	16,688	52	16,050	1,726	422	348
	1977	97	38,963	68	37,325	3,564	823	595
Melvindale	1972	83	33,304	63	32,718	3,257	753	652
	1977	71	45,208	54	44,078	5,649	1,318	918
Menominee	1972	143	27,379	96	26,496	2,587	585	594
	1977	125	50,533	85	48,596	4,871	1,150	852
Midland	1972	402	127,756	286	125,516	14,374	3,342	2,647
	1977	369	(D)	278	(D)	(D)	(D)	(D)
Milan	1972	68	16,423	44	15,787	1,494	341	257
	1977	67	25,698	40	(D)	(D)	(D)	(D)
Milford	1972	75	20,250	53	19,388	1,902	456	320
	1977	82	32,604	48	31,645	2,914	658	367
Monroe	1972	363	122,269	257	118,779	14,338	3,375	2,690
	1977	246	92,173	186	89,146	10,037	2,237	1,466
Mount Clemens	1972	304	103,025	214	100,552	10,814	2,660	1,921
	1977	273	139,325	182	135,288	15,762	3,814	2,081
Mount Morris	1972	77	17,679	46	16,746	1,656	401	292
	1977	70	29,400	51	28,248	2,525	548	305
Mount Pleasant	1972	216	60,317	162	59,076	7,482	1,677	1,647
	1977	257	114,980	211	113,136	13,856	3,172	2,333
Muskegon	1972	425	130,019	309	126,669	16,138	3,639	3,201
	1977	372	164,636	295	161,928	20,097	4,539	3,063

TABLE XXI-8. SELECTED DATA FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN CITIES AND VILLAGES OF 2,500 INHABITANTS OR MORE: 1972 AND 1977 (cont.)

City	Year	All establishments[a]		Establishments with payroll				
						Payroll ($1,000)		
		Number	Sales ($1,000)	Number	Sales ($1,000)	Entire year	First quarter	Paid employees 12 March[b]
Muskegon Heights	1972	153	32,221	118	31,322	3,797	869	799
	1977	126	31,244	101	30,242	3,897	892	615
Munising	1972	79	10,834	63	10,618	1,040	230	267
	1977	76	17,972	55	17,315	1,735	404	309
Negaunee	1972	68	10,244	47	9,771	936	209	254
	1977	60	12,466	41	11,555	1,165	275	341
New Baltimore	1972	72	12,154	50	11,588	1,138	246	211
	1977	61	21,877	41	20,969	2,221	492	311
New Buffalo	1972	53	6,628	40	6,400	860	179	259
	1977	64	11,172	39	10,522	1,455	354	297
Niles	1972	281	67,511	180	65,157	7,647	1,772	1,573
	1977	188	65,340	130	63,481	7,916	1,892	1,276
North Muskegon	1972	44	7,511	28	7,181	813	200	173
	1977	43	19,094	31	18,905	2,199	516	270
Northville	1972	93	26,079	63	25,256	2,813	657	628
	1977	109	42,915	79	42,122	4,738	1,145	883
Norton Shores	1972	123	61,787	83	61,051	5,571	1,170	1,129
	1977	126	107,891	96	106,928	15,140	2,730	1,664
Norway	1972	51	5,645	38	5,323	428	101	125
	1977	43	10,153	32	9,824	830	190	123
Novi	1972	73	13,884	39	13,010	1,192	270	287
	1977	139	72,295	102	69,995	8,089	861	509
Oak Park	1972	390	108,802	202	102,863	12,835	3,043	2,335
	1977	360	158,917	209	153,171	20,279	4,810	2,492
Otsego	1972	46	7,325	34	6,978	853	204	218
	1977	54	12,158	33	11,626	1,343	298	229
Owosso	1972	224	47,491	173	46,039	5,832	1,344	1,339
	1977	198	61,294	154	60,023	7,307	1,810	1,228
Oxford	1972	57	8,051	39	7,633	834	188	198
	1977	52	12,726	36	11,919	1,424	295	244
Paw Paw	1972	62	16,220	51	16,070	1,784	375	350
	1977	84	30,094	60	29,596	2,858	600	453

TABLE XXI-8. SELECTED DATA FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN CITIES AND VILLAGES OF 2,500 INHABITANTS OR MORE: 1972 AND 1977 (cont.)

City	Year	All establishments[a] Number	All establishments[a] Sales ($1,000)	Establishments with payroll Number	Establishments with payroll Sales ($1,000)	Payroll ($1,000) Entire year	Payroll ($1,000) First quarter	Paid employees 12 March[b]
Petoskey	1972	213	57,696	176	56,946	6,806	1,483	1,220
	1977	228	98,791	191	97,094	11,604	2,569	1,675
Plainwell	1972	94	13,477	57	12,589	1,490	317	341
	1977	84	25,839	51	23,767	2,310	583	301
Pleasant Ridge	1972	27	3,385	16	3,236	566	129	103
	1977	16	3,281	11	3,103	378	107	98
Plymouth	1972	166	54,032	118	52,726	5,796	1,518	988
	1977	184	86,803	132	84,529	9,042	2,002	1,136
Pontiac	1972	544	224,606	410	219,869	27,309	6,470	4,738
	1977	439	305,080	371	301,297	35,947	8,351	4,468
Portage	1972	260	92,771	187	91,116	10,890	2,533	2,389
	1977	294	176,371	225	173,659	24,818	4,911	3,212
Port Huron	1972	456	130,714	334	127,667	16,859	3,904	3,252
	1977	407	178,775	310	175,282	22,760	5,377	3,480
Portland	1972	62	10,455	38	9,910	960	219	223
	1977	57	17,586	33	16,704	2,193	390	328
Richmond	1972	84	22,799	52	21,955	1,846	464	315
	1977	77	38,256	51	37,113	2,953	780	410
River Rouge	1972	111	16,607	85	15,674	1,776	415	402
	1977	84	19,231	65	18,345	1,912	448	325
Riverview	1972	77	18,744	54	18,386	2,583	640	707
	1977	105	42,339	75	41,495	5,882	1,245	982
Rochester	1972	170	47,569	123	45,836	5,550	1,282	1,164
	1977	179	83,245	140	81,555	10,030	2,480	1,783
Rockwood	1972	22	2,343	14	2,204	166	38	51
	1977	23	13,400	18	13,163	1,008	254	114
Rogers City	1972	72	12,753	55	12,331	1,195	274	266
	1977	75	19,836	56	18,349	1,707	404	320
Romeo	1972	81	11,047	47	10,103	1,004	246	225
	1977	67	16,744	42	15,524	1,316	290	237
Romulus	1972	145	28,643	85	26,863	5,602	1,384	1,144
	1977	144	57,468	97	55,019	10,018	2,383	1,407

TABLE XXI-8. SELECTED DATA FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN CITIES AND VILLAGES OF 2,500 INHABITANTS OR MORE: 1972 AND 1977 (cont.)

		All establishments[a]		Establishments with payroll				
						Payroll ($1,000)		Paid employees 12 March[b]
City	Year	Number	Sales ($1,000)	Number	Sales ($1,000)	Entire year	First quarter	
Roosevelt Park	1972	32	16,033	23	15,953	2,034	455	517
	1977	33	22,888	25	22,623	3,332	785	614
Roseville	1972	406	224,489	285	221,229	27,880	6,587	5,143
	1977	370	303,646	296	299,605	38,945	9,020	5,505
Royal Oak	1972	681	214,804	469	208,895	28,036	6,742	4,889
	1977	578	338,555	416	330,972	40,958	9,668	5,308
Saginaw	1972	748	211,031	549	205,558	26,837	6,366	5,029
	1977	645	254,217	484	247,136	32,916	7,747	4,642
St. Clair	1972	88	18,471	61	17,518	1,854	402	347
	1977	66	24,574	42	23,325	3,036	651	400
St. Clair Shores	1972	547	148,968	357	142,993	16,203	3,749	3,360
	1977	614	245,257	422	237,914	28,867	6,714	4,077
St. Ignace	1972	70	10,278	60	10,117	1,087	170	163
	1977	70	15,416	56	14,923	1,760	362	227
St. Johns	1972	108	28,251	77	27,263	2,785	613	560
	1977	111	57,977	81	57,067	6,108	1,472	882
St. Joseph	1972	192	30,134	131	28,514	4,107	974	1,006
	1977	165	74,047	126	72,308	9,858	2,325	1,392
St. Louis	1972	65	7,834	36	7,368	831	189	204
	1977	66	12,111	42	11,340	1,329	298	236
Saline	1972	50	13,451	37	13,225	1,572	373	330
	1977	66	23,669	43	23,001	2,710	605	433
Sault Ste. Marie	1972	224	53,770	159	50,126	5,621	1,222	1,116
	1977	215	72,234	165	69,108	8,065	1,841	1,163
Southfield	1972	712	419,386	423	410,494	47,258	10,890	8,401
	1977	983	778,169	731	767,267	97,704	23,801	14,315
Southgate	1972	251	171,951	200	170,143	18,547	4,473	3,159
	1977	231	281,200	200	279,302	29,523	7,117	3,538
South Haven	1972	97	31,377	79	30,677	3,202	705	619
	1977	119	48,481	87	47,567	5,918	1,361	721
South Lyon	1972	44	9,047	27	8,747	1,015	237	213
	1977	57	18,437	31	17,256	1,990	413	285

TABLE XXI-8. SELECTED DATA FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN CITIES AND VILLAGES OF 2,500 INHABITANTS OR MORE: 1972 AND 1977 (cont.)

City	Year	All establishments[a]		Establishments with payroll				
						Payroll ($1,000)		
		Number	Sales ($1,000)	Number	Sales ($1,000)	Entire year	First quarter	Paid employees 12 March[b]
Sparta	1972	65	9,636	44	9,195	786	184	204
	1977	55	14,326	38	13,849	1,159	286	196
Springfield	1972	45	10,799	28	10,370	1,230	288	212
	1977	33	8,970	24	8,841	1,358	332	230
Springlake	1972	68	8,108	44	7,754	823	176	208
	1977	54	9,354	28	8,138	815	190	173
Sterling Heights	1972	271	124,121	178	122,199	13,515	2,895	2,579
	1977	423	373,721	324	370,143	41,061	9,231	5,453
Sturgis	1972	172	44,575	131	43,025	5,111	1,215	1,101
	1977	151	61,069	103	59,274	6,444	1,465	945
Swartz Creek	1972	61	7,700	37	7,265	963	225	190
	1977	43	8,557	21	7,830	967	196	161
Taylor	1972	408	194,826	280	190,725	21,590	4,632	3,999
	1977	425	345,266	346	341,901	39,503	8,691	5,232
Tecumseh	1972	104	23,252	75	22,064	2,325	542	497
	1977	102	37,433	78	36,140	3,957	852	557
Three Rivers	1972	150	32,612	101	31,519	3,315	740	661
	1977	136	44,717	104	43,872	4,745	1,169	641
Traverse City	1972	376	121,655	289	119,610	15,618	3,437	2,778
	1977	429	156,105	319	151,997	22,089	5,245	3,169
Trenton	1972	151	38,158	109	37,206	4,418	973	1,043
	1977	150	65,397	112	64,132	6,975	1,569	1,093
Troy	1972	319	313,063	204	310,053	37,993	8,887	6,047
	1977	486	568,439	367	562,762	67,574	15,711	8,427
Utica	1972	115	28,441	88	27,856	3,333	771	665
	1977	115	46,196	90	44,976	5,306	1,214	769
Vassar	1972	69	15,148	49	14,584	1,320	314	277
	1977	75	23,534	48	22,528	2,080	477	309
Wakefield	1972	40	3,276	26	2,874	307	90	134
	1977	34	4,210	22	3,861	402	104	101
Walker	1972	129	84,297	85	83,301	7,275	1,670	1,403
	1977	125	145,496	97	144,086	20,006	3,686	2,209

TABLE XXI-8. SELECTED DATA FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN CITIES AND VILLAGES OF 2,500 INHABITANTS OR MORE: 1972 AND 1977 (cont.)

		All establishments[a]		Establishments with payroll				
						Payroll ($1,000)		
City	Year	Number	Sales ($1,000)	Number	Sales ($1,000)	Entire year	First quarter	Paid employees 12 March[b]
Walled Lake	1972	58	21,476	47	21,195	2,314	497	391
	1977	78	42,278	61	41,256	4,674	1,131	833
Warren	1972	949	452,123	695	443,758	49,282	11,440	9,366
	1977	961	702,221	719	689,662	82,384	19,267	11,078
Wayne	1972	184	84,541	145	82,855	9,488	2,234	1,652
	1977	168	133,202	140	131,683	13,109	3,206	1,520
Westland	1972	405	213,958	260	210,874	22,873	4,962	4,232
	1977	434	340,877	323	335,955	37,549	9,022	5,299
Whitehall	1972	62	11,109	44	10,526	1,088	247	275
	1977	62	15,883	42	15,091	1,723	388	306
Williamston	1972	57	8,348	34	7,938	750	186	170
	1977	49	9,645	31	9,265	888	212	144
Woodhaven	1972	29	22,037	18	21,887	2,653	568	462
	1977	43	61,906	37	61,741	7,193	1,589	1,007
Wolverine Lake	1972	10	941	5	713	49	13	12
	1977	11	978	3	566	39	9	9
Wyandotte	1972	290	72,373	218	69,962	8,725	2,125	1,744
	1977	269	70,263	188	66,205	8,634	2,135	1,326
Wyoming	1972	579	199,643	438	196,046	24,146	5,577	5,364
	1977	461	269,479	343	263,515	35,105	8,073	5,373
Ypsilanti	1972	256	71,159	189	68,953	9,153	2,165	1,843
	1977	206	70,186	147	67,494	9,493	2,308	1,650
Zeeland	1972	64	13,501	48	12,732	1,337	313	358
	1977	64	19,751	43	18,318	2,169	493	429
Central Business Districts								
Ann Arbor	1972	148	48,262	n.a.	n.a.	8,509	2,061	1,814
	1977	190	69,207	n.a.	n.a.	12,773	2,858	2,192
Battle Creek	1972	52	25,041	n.a.	n.a.	3,918	n.a.	836
	1977	91	35,183	n.a.	n.a.	5,482	n.a.	853
Bay City	1972	148	67,297	n.a.	n.a.	9,133	2,201	1,769
	1979	126	73,265	n.a.	n.a.	10,235	2,475	1,447
Detroit	1972	609	291,442	n.a.	n.a.	55,864	13,254	9,717
	1977	473	241,729	n.a.	n.a.	47,600	12,237	7,028

TABLE XXI-8. SELECTED DATA FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN CITIES AND VILLAGES OF 2,500 INHABITANTS OR MORE: 1972 AND 1977 (cont.)

		All establishments[a]		Establishments with payroll				
						Payroll ($1,000)		
City	Year	Number	Sales ($1,000)	Number	Sales ($1,000)	Entire year	First quarter	Paid employees 12 March[b]
				Central business districts (cont.)				
East Lansing	1972	53	16,531	n.a.	n.a.	2,995	n.a.	759
	1979	76	26,119	n.a.	n.a.	4,552	n.a.	1,060
Flint	1972	226	84,350	n.a.	n.a.	13,794	3,277	2,608
	1979	198	73,342	n.a.	n.a.	11,674	2,629	1,494
Grand Rapids	1972	137	58,500	n.a.	n.a.	11,446	2,793	2,180
	1977	116	67,420	n.a.	n.a.	14,427	3,499	2,028
Jackson	1972	98	49,084	n.a.	n.a.	7,153	n.a.	1,378
	1979	86	46,066	n.a.	n.a.	6,764	n.a.	898
Kalamazoo	1972	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	1979	165	92,047	n.a.	n.a.	12,597	2,994	1,810
Lansing	1972	108	45,019	n.a.	n.a.	9,291	1,998	1,907
	1979	101	44,957	n.a.	n.a.	7,395	1,792	1,325
Muskegon	1972	34	19,853	n.a.	n.a.	3,209	n.a.	631
	1979	52	42,792	n.a.	n.a.	6,293	n.a.	949
Saginaw	1972	101	25,467	n.a.	n.a.	4,590	n.a.	865
	1979	69	30,881	n.a.	n.a.	6,563	n.a.	1,107
Pontiac	1972	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	1977	47	14,754	n.a.	n.a.	2,133	n.a.	275

SOURCE: Bureau of the Census, *U.S. Census of Retail Trade, 1972, Area Series, Michigan* (Washington, D.C.: 1974), RC72-A-23, Table 6; Bureau of the Census, *1977 Census of Retail Trade, Area Series, Michigan* (Washington, D.C.: 1979), RC77-A-23, Table 7; Bureau of the Census, *1972 Census of Retail Trade, Major Retail Centers in Standard Metropolitan Statistical Areas, Michigan* (Washington, D.C.: 1975), RC72-C-23, Table 1 for each SMSA; and Bureau of the Census, *1977 Census of Retail Trade, Major Retail Centers in Standard Metropolitan Statistical Areas, Michigan* (Washington, D.C.: 1980), RC77-C-23, Tables 1, 5, and 6 for each SMSA.

a. Excludes direct selling establishments without payroll in 1977.

b. Week including 12 March.

(D): Data withheld to avoid disclosing figures for individual companies.

TABLE XXI-9. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS RETAIL TRADE AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979

	Labor and proprietors' earnings in retail trade			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Clare	22.32	12,469	21.64	13,762
Missaukee	19.68	4,326	20.68	5,452
Roscommon	21.61	8,543	20.53	9,226
Lake	17.75	2,186	19.59	2,626
Mackinac	18.78	7,252	18.85	8,037
Crawford	15.59	4,795	18.84	5,553
Ogemaw	17.57	7,563	17.86	9,447
Cheboygan	18.97	13,991	17.73	15,202
Montmorency	17.69	3,603	17.43	3,740
Arenac	17.93	6,394	16.97	6,898
Gladwin	17.32	6,465	16.17	7,357
Emmet	17.02	18,857	16.10	20,138
Alcona	16.87	2,818	15.87	3,152
Livingston	15.23	37,118	15.45	44,438
Schoolcraft	16.41	5,326	15.11	5,489
Gogebic	15.48	9,012	14.95	9,772
Iron	14.59	6,509	14.82	7,330
Benzie	14.46	5,361	14.57	5,975
Grand Traverse	15.14	50,738	14.55	55,273
Otesego	13.81	10,468	14.18	12,483
Oscoda	12.81	1,778	13.91	2,103
Oceana	12.54	7,242	13.42	8,433
Leelanau	11.29	4,120	13.34	4,532
Isabella	13.16	27,282	13.21	30,110
Houghton	12.78	15,531	12.83	17,177
Clinton	12.26	14,685	12.77	17,294
Chippewa	13.42	13,416	12.65	13,464
Eaton	12.82	23,210	12.51	25,497
Newaygo	11.60	10,991	12.38	12,474
Wexford	11.66	13,704	11.59	15,292
Mecosta	11.05	11,527	11.39	13,170
Montcalm	10.91	19,790	11.37	22,309
Lapeer	10.94	23,898	11.31	26,634
Kalkaska	11.72	4,577	11.24	4,893
Bay	11.41	66,196	11.23	70,920

TABLE XXI-9. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS RETAIL TRADE AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979 (cont.)

	Labor and proprietors' earnings in retail trade			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Keweenaw	10.57	551	11.21	612
Iosco	11.14	13,095	11.11	14,142
Delta	11.44	19,091	11.10	20,643
Alger	11.25	3,361	11.06	3,651
Kent	11.70	367,071	11.03	403,489
St. Clair	10.72	59,612	10.82	63,741
Oakland	10.83	837,414	10.68	947,114
Alpena	11.30	18,444	10.67	19,326
Dickinson	11.22	16,806	10.67	18,311
Shiawassee	11.40	26,297	10.53	28,272
Ionia	10.10	19,094	10.45	21,143
Monroe	10.22	47,436	10.41	52,551
Sanilac	10.69	15,174	10.40	16,861
Antrim	10.63	5,606	10.35	6,128
Tuscola	10.83	20,588	10.26	22,617
Barry	10.20	12,744	10.21	14,514
Mason	10.16	11,040	10.11	12,482
Macomb	9.34	422,097	10.06	487,077
Manistee	9.75	9,635	9.85	10,677
Allegan	9.67	24,624	9.69	27,372
Gratiot	8.33	16,658	9.68	20,751
Jackson	9.58	86,270	9.58	95,229
Berrien	9.39	94,051	9.36	99,513
Osecola	8.93	5,351	9.36	6,277
Van Buren	8.92	19,035	9.19	21,625
Presque Isle	9.64	4,790	9.18	5,248
Marquette	8.97	37,600	9.12	41,933
Lenawee	9.36	40,891	8.98	44,289
Kalamazoo	9.51	142,669	8.91	151,891
Huron	8.76	14,003	8.86	16,312
Menominee	8.10	7,850	8.81	9,673
Charlevoix	8.92	7,766	8.79	8,641
St. Joseph	8.05	22,000	8.69	27,465
Muskegon	8.62	77,144	8.66	85,694
Ottawa	8.54	68,100	8.66	79,397

TABLE XXI-9. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS RETAIL TRADE AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979 (cont.)

	Labor and proprietors' earnings in retail trade			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Branch	8.83	18,981	8.25	18,944
Baraga	8.30	2,892	8.21	2,659
Calhoun	8.16	79,975	8.18	87,722
Luce	8.56	3,152	8.17	3,341
Hillsdale	8.93	15,212	8.16	15,538
Saginaw	7.76	134,377	7.89	148,912
Cass	8.22	13,765	7.81	14,040
Ingham	7.76	202,440	7.60	224,336
Wayne	7.35	1,549,133	7.29	1,642,741
Ontonagon	7.24	3,707	7.16	4,096
Genesee	6.77	262,974	6.79	282,395
Washtenaw	6.44	158,507	6.29	172,541
Midland	5.40	32,510	5.23	25,253
Michigan	8.80	5,553,093	8.79	6,094,062
United States	9.97	131,804,000	9.92	147,335,000

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

NOTE: Counties are ranked according to this sector's relative contribution to total labor and proprietors earnings (next-to-last column). These numbers pertain to earnings generated within the county, irrespective of the residence of the people who received them. For a complete tabultaion of earnings at the state level, see Tables VI-3 and VI-4. The earnings residence adjustment for all industries is shown in Table VI-13.

TABLE XXI-10. RANKING OF MICHIGAN COUNTIES ACCORDING TO PERCENTAGE CHANGE IN LABOR AND PROPRIETORS' EARNINGS IN RETAIL TRADE: 1978-1979

County	Percentage change 1974-1979	Percentage change 1978-1979	County	Percentage change 1974-1979	Percentage change 1978-1979
Missaukee	121	26	Clare	71	10
Gratiot	38	25	Eaton	28	10
Ogemaw	77	25	Isabella	97	10
St. Joseph	52	25	Jackson	57	10
Menominee	57	23	Kent	43	10
Lake	58	20	Leelanau	59	10
Livingston	105	20	Ontonagon	43	10
Otsego	104	19	Presque Isle	55	10
Clinton	71	18	Tuscola	45	10
Oscoda	54	18	Alger	48	9
Osecola	41	17	Antrim	51	9
Ottawa	92	17	Baraga	31	9
Crawford	68	16	Cheboygan	64	9
Huron	26	16	Dickinson	76	9
Oceana	40	16	Grand Traverse	83	9
Macomb	114	15	Washtenaw	56	9
Barry	71	14	Arenac	70	8
Gladwin	73	14	Delta	22	8
Mecosta	78	14	Gogebic	45	8
Van Buren	32	14	Iosco	45	8
Iron	65	13	Lenawee	31	8
Mason	55	13	Midland	75	8
Montcalm	45	13	Roscommon	45	8
Newaygo	77	13	Shiawassee	42	8
Oakland	88	13	Bay	49	7
Marquette	72	12	Emmet	59	7
Wexford	68	12	Genesee	59	7
Alcona	43	12	Kalkaska	84	7
Allegan	53	11	St. Clair	51	7
Benzie	93	11	Berrien	35	6
Charlevoix	47	11	Kalamazoo	78	6
Houghton	46	11	Luce	58	6
Ingham	68	11	Wayne	22	6
Ionia	59	11	Alpena	45	5
Keweenaw	87	11	Branch	64	5
Lapeer	68	11	Montmorency	92	4
Mackinac	56	11	Schoolcraft	68	3
Manistee	84	11	Cass	38	2
Monroe	40	11	Hillsdale	17	2
Muskegon	59	11	Chippewa	34	0
Saginaw	51	11			
Sanilac	35	11	Michigan	51	10
Calhoun	50	10	United States	59	12

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

TABLE XXI-11. ESTIMATED ANNUAL SALES OF RETAIL STORES IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, THE STATE OF MICHIGAN, AND THE UNITED STATES: 1965-1980

(millions of dollars)

Year	Detroit Standard Metropolitan Statistical Area		Michigan		United States	
	Nondurable goods	Total	Nondurable goods	Total	Nondurable goods	Total
1966	(a)	6,717	8,765	13,732	205,860	303,672
1967	4,577	6,896	8,957	14,022	213,636	313,809
1968	5,476	8,178	10,372	15,975	229,079	339,324
1969	5,511	8,158	10,747	16,161	284,722	351,633
1970	5,679	8,095	11,154	16,317	261,239	375,633
1971	5,874	8,829	11,962	18,342	277,036	408,850
1972	6,164	9,159	12,934	19,792	298,720	448,379
1973	6,821	10,159	14,554	22,181	333,042	503,317
1974	7,324	10,461	15,604	22,775	370,469	537,782
1975	7,607	10,981	16,357	23,964	403,698	584,423
1976	8,234	12,444	18,067	27,034	437,611	651,694
1977	n.a.	n.a.	n.a.	29,520[b]	n.a.	708,344[b]
1978	11,793	19,707	22,524	36,274	520,902	798,818
1979	13,045	21,614	25,119	39,676	580,189	884,133
1980	14,214	22,464	26,804	40,123	643,943	994,324

SOURCE: U.S. Bureau of the Census, *Monthly Retail Trade, Sales and Accounts Receivable*, December 1966 through 1980 (Washington, D.C.: annually), BR-80-12, Tables 1, 6, and 7 (1980).

NOTE: Figures are not strictly comparable over time because of changes in the sample of stores used for the estimate and revisions in the estimating procedure itself.

a. Not available prior to 1966

b. Based on revised sample not strictly comparable with data for previous years. The revised (comparable) figure for the U.S. for 1976, for example, is $642,507,000,000, and for 1975, $580,445,000,000. Revised Michigan data are not available.

n.a.: not available.

TABLE XXI-12. ESTIMATED MONTHLY SALES BY RETAIL STORES IN THE CITY OF DETROIT, THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, THE STATE OF MICHIGAN AND THE UNITED STATES: 1978-1981

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Detroit City						
1978	215	248	294	290	310	308	282	303	277	311	304	329
1979	261	266	308	306	308	313	308	293	270	302	311	354
1980	311	303	322	306	291	281	294	266	262	304	270	331
1981	306	321	368	365	325	309	316	285	281	303	291	
						Detroit SMSA						
1978	1,206	1,307	1,582	1,558	1,684	1,748	1,570	1,699	1,619	1,792	1,807	2,135
1979	1,533	1,536	1,835	1,766	1,864	1,909	1,748	1,786	1,670	1,824	1,898	2,245
1980	1,687	1,661	1,808	1,774	1,799	1,842	1,905	1,815	1,776	2,011	1,795	2,411
1981	1,828	1,729	2,098	2,099	2,078	2,039	1,971	1,908	1,875	1,961	1,932	
						Michigan						
1978	2,224	2,379	2,887	2,862	3,115	3,213	2,995	3,195	3,021	3,267	3,317	3,799
1979	2,791	2,756	3,290	3,225	3,419	3,453	3,258	3,391	3,160	3,450	3,487	3,996
1980	3,050	2,968	3,184	3,183	3,295	3,262	3,461	3,323	3,202	3,579	3,463	4,153
1981	3,195	3,027	3,537	3,611	3,652	3,651	3,655	3,552	3,448	3,608	3,507	
						United States						
1978	53,342	53,806	65,119	64,233	68,412	69,592	67,103	69,719	66,822	69,290	72,012	85,234
1979	62,549	61,331	73,048	71,282	75,551	75,614	72,928	78,762	73.457	77,374	79,896	92,551
1980	70,564	70,621	75,998	75,154	79,202	77,366	79,860	81,740	77,579	84,000	83,816	100,755
1981	77,361	74,321	84,652	85,770	87,383	87,784	88,768	89,555	86,023	89,289	87,978	

SOURCE: Bureau of the Census, Monthly Retail Trade (Washington, D.C.).

TABLE XXI-13. DEPARTMENT STORE SALES AND NUMBER OF DEPARTMENT STORES IN SELECTED MICHIGAN STANDARD METROPOLITAN STATISTICAL AREAS AND CITIES: 1978, 1979 AND 1980

	1978		1979		1980	
	Sales ($000)	Number of stores	Sales ($000)	Number of stores	Sales ($000)	Number of stores
SMSAs						
Ann Arbor	147,084	8	156,303	9	167,154	11
Detroit	2,065,279	120	2,141,996	113	2,116,864	115
Flint	286,402	24	298,275	26	313,463	22
Grand Rapids	369,996	26	403,340	27	435,318	27
Jackson	106,376	7	112,610	7	113,188	6
Kalamazoo-Portage	158,133	14	179,180	14	194,375	18
Lansing-East Lansing	275,184	16	302,454	17	309,371	14
Muskegon-Muskegon Heights-Norton Shores	98,132	7	107,459	7	108,757	7
Cities						
Battle Creek	72,277	4	79,713	4	D	2

SOURCE: Bureau of the Census, Monthly Retail Trade, Sales and Accounts Receivable, December 1980 (Washington D.C.: annually), BR-80-12, Tables 8 and 8A.

D: Withheld to avoid disclosing data for individual companies.

TABLE XXI-14. LICENSES ISSUED IN MICHIGAN FOR FOOD SERVICE ESTABLISHMENTS AND FOR VENDING MACHINE LOCATIONS WHERE PERISHABLE FOODS AND BEVERAGES ARE DISPENSED, BY COUNTY, FOR THE LICENSE PERIOD 1 MAY 1980 TO 30 APRIL 1981

	Food service establishments[a]			Mobil establishments[b]			Vending machine locations[c]		
County	Renewal	New owner	New establishment	Renewal	New owner	New establishment	Renewal	New owner	New establishment
Alcona	59	5	4	0	0	0	1	1	0
Alger	54	11	2	0	0	0	0	0	0
Allegan	223	23	24	3	2	3	15	1	1
Alpena	91	11	6	0	0	1	13	0	3
Antrim	68	6	3	0	0	0	0	0	0
Arenac	53	10	5	0	0	0	1	0	0
Baraga	40	3	1	0	0	0	0	0	0
Barry	92	9	13	2	2	2	11	0	4
Bay	326	40	19	0	0	2	52	7	7
Benzie	48	8	3	1	0	0	1	0	1
Berrien	509	55	44	6	1	3	112	14	12
Branch	104	19	6	1	0	0	18	3	2
Calhoun	395	35	20	3	2	2	80	11	30
Cass	108	16	8	0	7	2	25	1	3
Charlevoix	95	15	4	2	0	0	0	0	0
Cheboygan	95	22	5	0	0	1	0	0	0
Chippewa	166	18	3	2	0	1	0	0	0
Clare	87	10	3	2	2	1	1	3	0
Clinton	117	14	8	1	0	1	8	0	1
Crawford	47	5	5	0	0	0	0	0	0
Delta	144	16	13	1	0	3	23	0	2
Dickinson	102	10	6	0	1	0	8	0	9
Eaton	226	20	16	3	0	4	35	3	2
Emmet	129	14	6	1	0	2	0	0	0
Genesee	1013	161	84	12	0	8	299	13	43

TABLE XXI-14. LICENSES ISSUED IN MICHIGAN, FOR FOOD SERVICE ESTABLISHMENTS AND FOR VENDING MACHINE LOCATIONS WHERE PERISHABLE FOODS AND BEVERAGES ARE DISPENSED, BY COUNTY, FOR THE LICENSE PERIOD 1 MAY 1980 TO 30 APRIL 1981 (cont.)

	Food service establishments[a]			Mobil establishments[b]			Vending machine locations[c]		
County	Renewal	New owner	New establishment	Renewal	New owner	New establishment	Renewal	New owner	New establishment
Gladwin	48	7	5	0	1	1	1	1	1
Gogebic	119	8	10	0	0	0	0	0	0
Grand Traverse	164	23	18	7	0	1	16	8	8
Gratiot	102	17	6	2	0	0	5	0	0
Hillsdale	108	15	8	0	0	1	16	7	9
Houghton	161	11	8	0	0	0	1	0	0
Huron	147	13	11	0	0	0	13	0	13
Ingham	686	54	41	6	2	0	199	1	28
Ionia	140	13	8	1	1	1	14	0	1
Iosco	107	19	6	2	1	0	2	0	0
Iron	72	15	2	1	0	0	2	0	1
Isabella	110	24	5	0	1	0	4	4	6
Jackson	431	39	26	14	1	1	104	7	10
Kalamazoo	564	88	58	0	0	2	155	12	5
Kalkaska	39	3	1	0	1	0	1	0	0
Kent	931	194	73	15	2	11	282	0	39
Keweenaw	26	1	0	0	0	1	0	0	0
Lake	36	4	3	0	0	0	0	0	0
Lapeer	118	18	18	2	1	1	6	0	7
Leelanau	58	13	3	0	0	0	0	0	0
Lenawee	253	43	18	4	0	1	29	9	6
Livingston	169	20	19	2	0	1	13	0	18
Luce	36	2	2	0	0	0	0	0	0
Mackinac	114	14	9	0	0	1	0	0	0
Macomb	1,589	308	124	15	6	17	540	32	122

TABLE XXI-14. LICENSES ISSUED IN MICHIGAN, FOR FOOD SERVICE ESTABLISHMENTS AND FOR VENDING MACHINE LOCATIONS WHERE PERISHABLE FOODS AND BEVERAGES ARE DISPENSED, BY COUNTY, FOR THE LICENSE PERIOD 1 MAY 1980 TO 30 APRIL 1981 (cont.)

	Food service establishments[a]			Mobil establishments[b]			Vending machine locations[c]		
County	Renewal	New owner	New establishment	Renewal	New owner	New establishment	Renewal	New owner	New establishment
Manistee	98	12	10	1	0	0	6	0	1
Marquette	223	28	14	1	0	1	2	15	5
Mason	108	17	12	0	0	3	7	0	1
Mecosta	87	14	6	2	0	1	22	0	2
Menominee	105	11	2	0	0	0	11	0	1
Midland	152	15	16	1	1	4	25	0	2
Missauke	31	1	0	0	0	0	0	0	0
Monroe	344	32	24	7	0	1	49	3	13
Montcalm	146	17	10	1	0	3	13	0	1
Montmorency	41	6	2	0	0	0	0	0	0
Muskegon	414	52	28	1	3	1	147	2	24
Newaygo	101	9	7	2	1	1	3	0	0
Oakland	2,288	309	222	32	9	40	517	22	149
Oceana	97	13	4	1	1	1	4	0	0
Ogemaw	55	5	2	0	0	1	0	0	0
Ontonagon	64	3	1	0	0	0	0	0	0
Osceola	48	4	6	2	1	0	5	0	0
Oscoda	35	1	1	0	0	1	0	0	0
Otsego	74	10	6	1	0	1	6	0	1
Ottawa	336	34	14	4	2	2	77	11	44
Presque Isle	51	10	4	0	0	0	0	0	0
Roscommon	115	24	10	0	0	0	0	0	0
Saginaw	562	69	50	13	2	3	78	29	7
St. Clair	347	44	29	1	2	2	99	0	26
St. Joseph	161	31	16	3	0	2	19	9	5

TABLE XXI-14. LICENSES ISSUED IN MICHIGAN, FOR FOOD SERVICE ESTABLISHMENTS AND FOR VENDING MACHINE LOCATIONS WHERE PERISHABLE FOODS AND BEVERAGES ARE DISPENSED, BY COUNTY, FOR THE LICENSE PERIOD 1 MAY 1980 TO 30 APRIL 1981 (cont.)

	Food service establishments[a]			Mobil establishments[b]			Vending machine locations[c]		
County	Renewal	New owner	New establishment	Renewal	New owner	New establishment	Renewal	New owner	New establishment
Sanilac	115	19	3	1	1	0	24	0	5
Schoolcraft	54	8	5	0	0	0	0	0	1
Shiawassee	155	20	10	0	0	0	21	0	1
Tuscola	139	10	5	1	0	2	19	0	2
Van Buren	184	14	18	1	1	4	34	0	7
Washtenaw	600	76	55	4	0	7	163	1	24
Wayne	5,525	769	396	179	28	63	1,188	232	285
Wexford	79	16	4	1	1	0	15	1	4
Illinois	0	0	0	0	0	0	0	0	0
Indiana	0	0	0	0	1	1	0	0	0
TOTAL	23,658	3,231	1,785	371	88	223	4,660	463	1,005

SOURCE: Michigan Department of Health, Division of Food Service Sanitation, special release.

a. Includes cafeterias, restaurants, delicatessens, soda fountains, drive-ins, bars, taverns, factory commissaries, college dormitories, and other fixed establishments where food is prepared for consumption on the premises. Does not apply to state and county fairs and other temporary food service establishments: carnivals, circuses, public exhibitions, or similar transitory gatherings.

b. Applies to each mobile unit, according to its county or state home base.

c. Locations where food is offered through self-service, coin-operated devices, excepting devices which dispense only bottled or canned soft drinks, other packaged nonperishable foods or beverages, or bulk ball gum, nuts, and panned candies.

TABLE XXI-15. BRANDED GASOLINE RETAIL OUTLETS IN MICHIGAN: 1974-1981

	1974	1975	1976	1977	1978	1979	1980	1981
American Oil Co. (Amoco)[a]	1,763	1,646	1,547	1,687	1,531	1,363	1,304	1,249
Ashland Oil Inc.	0	0	0	0	0	0	0	0
Atlantic Richfield Co[b]	516	476	389	262	101	143	133	130
Autotronic Systems, Inc.	0	1	3	--	3	--	--	--
Bay Refining Co.	125	119	0	--	(b)	--	--	--
Boron Oil Corp.	(c)	(c)	(c)	(c)	(c)	--	--	--
Champlin Petroleum Co.	3	3	2	2	--	--	1	2
Checker Oil Co.	37	36	38	41	41	--	--	49
Cities Service Oil Co.	249	129	66	2	--	63	65	60
Clark Oil & Refining Co.[d]	332	331	331	331	329	328	328	328
Consolidated Stations, Inc.	0	4	85	--	--	--	--	--
Consumers Petroleum Co.	0	0	110	119	113	107	--	--
Continental Oil Co.	0	0	0	10	9	0	--	--
Drake's Refinery Stations, Inc.	--	--	--	--	--	20	15	15
Exxon Co., U.S.A.	(c)	(c)	(c)	10	0	0	0	--
Fisco Oil Co., Inc.	9	9	8	9	9	9	9	9
Fleet Wing Div. Pennzoil Co.	5	5	0	0	--	--	--	--
Dow Foster Oil Co.	--	--	--	--	51	--	--	--
Great Northern Oil Co.	0	0	0	0	--	--	--	--
Gulf Oil Corp.	371	339	306	308	227	178	314	208
Hi-fy Gas Stations, Inc.	15	--	--	--	--	--	--	--
Highway Oil, Inc.	2	2	2	2	2	--	2	3
Hudson Oil Co.	(c)	(c)	(c)	(c)	(c)	8	8	5
Humble Oil & Refining Co.	0	0	0	--	--	--	--	--
Kayo Oil Co.	79	79	68	68	(c)	--	--	--
Kerr-McGee Corp.	6	5	5	6	6	6	4	--
Kickapoo Oil Co., Inc.	--	75	0	--	--	--	--	--
Kimber Petroleum Corp.	--	--	--	16	--	--	--	--
Koch Refining, Inc.	16	16	16	0	13	0	--	--
Leonard Refining, Inc. (Total Leonard, Inc.)	699	630	636	628	(c)	--	--	--
Marathon Oil Co.	827	810	733	603	569	542	437	442
Martin Oil Service, Inc	29	29	29	29	28	28	28	20
McLeicer	--	--	--	--	47	--	--	--
Meade Corp.[e]	--	--	--	--	27	--	--	--
Meadville Corp.	--	--	0	0	--	--	--	--

TABLE XXI-15. BRANDED GASOLINE RETAIL OUTLETS IN MICHIGAN: 1974-1981 (cont.)

	1974	1975	1976	1977	1978	1979	1980	1981
MiCo Oil Co., Inc.	--	--	--	--	--	1	1	1
Midland Coops., Inc.	10	10	10	11	11	11	11	12
Miller Oil Co.	--	--	--	--	7	4	2	1
Mobil Oil Co.	1,096	1,076	1,079	1,076	1,019	962	898	863
Murphy Oil Corp.	71	67	60	55	55	49	47	44
Naph Sol Refining Co.	235	223	223	223	178	150	93	--
North Star Oil Corp.	1	0	0	--	--	--	--	--
Payless Stations, Inc.	15	0	0	--	--	--	--	--
Pennzoil Co.	10	0	0	--	19	--	--	--
Phillips Petroleum Co.[f]	236	232	142	124	167	205	160	197
Private Brand Services, Inc.	--	--	--	--	--	7	9	--
Shell Oil Co.	505	505	494	464	382	349	350	315
Sigmor Oil Co.	--	--	--	--	--	3	3	3
Site Oil Co.	2	2	2	2	--	--	--	--
Skelly Oil Co.	4	4	4	--	--	--	--	--
South Central Oil Co.	6	0	0	9	9	8	--	3
Sun Oil Co. (Sun Mark)	(c)	866	831	831	641	658	--	--
Super Go-Marketers, Inc.	15	0	0	--	--	--	--	--
Texaco, Inc.	733	577	595	717	557	619	595	374
Thornton Oil Co.	--	--	--	--	--	(c)	1	2
Total Petroleum, Inc.[g]	--	--	--	--	598	519	--	516
Tulsa Oil Corp.	71	71	0	66	59	--	--	--
U-Save Automatic Corp.	0	0	0	--	--	--	--	--
Union Oil Co. of California	566	607	639	621	639	535	506	512
United Refining Co.	0	34	32	28	12	0	--	--
Warelubco Inc.	--	--	--	--	--	1	--	--
Webb Oil Co.	--	--	--	--	18	21	18	20

SOURCE: National Petroleum News, Factbook Issue mid-June, 1974-1981, pp. 62-67.

a. Includes Omega Oil Co.
b. Includes Prestige Stations, Inc.
c. Company markets in Michigan, but figures not supplied.
d. Includes Ownes and Bronco.
e. Includes Maverick Oil Co.
f. Includes Pyramid Oil Co., Tallman Oil Co., Metro 66, and Aero Oil Co.
g. Total and Best Division, Total Petroleum.
--: Companies no longer operating branded retail outlets or data not available.

Information on the number of banking offices in the state and operating statistics of insured banks are available from the Federal Deposit Insurance Corporation. Data on bank activity throughout the state are contained in the publications and releases of the Board of Governors of the Federal Reserve System. The Board of Governors releases Bank Debits and Deposit Turnover monthly, listing debits for the Federal Reserve districts and the principal cities. Detailed information on bank debits in Michigan also is available in the releases of the Federal Reserve banks of Chicago and Minneapolis.

Total time and demand deposits by counties and states are available in the F.D.I.C. publication, Summary of Deposits in All Commercial and Mutual Savings Banks. Information on bank balance sheet items and operations can be obtained in two other F.D.I.C. publications, Bank Operating Statistics and Assets and Liabilities - Commercial and Mutual Savings.

Detailed data about the operations of savings and loan associations are presented in the annual Asset and Liability Trends, published by the Federal Home Loan Bank Board. Small loan company and state-chartered credit union operations in Michigan are covered in Analysis and Recapitulation of Reports of Regulatory Loan Licenses and Abstracts of Reports of Credit Unions, respectively, of the Financial Institutions Bureau, Michigan Department of Commerce. Similar data on credit unions chartered by the federal government are given in the Annual Report published by the Bureau of Federal Credit Unions. Information on production credit associations is available in the Annual Report of the U.S. Farm Credit Administration.

The basic source of information about insurance operations in Michigan is the Annual Report of the Michigan Department of Insurance. This includes the home office address and a summary of financial conditions for all companies licensed to do business in Michigan. The annual Life Insurance Fact Book of the Institute of Life Insurance presents data about the amount of insurance in force, benefit payments, premium collections, and so forth, for the United States, as well as a good deal of information on a state basis.

Statistics on the number of certified public accountants and real estate brokers and salesmen licensed in each county are tabulated by the Michigan Department of Regulation, which licenses these occupations.

The economic importance of finance, insurance, and real estate in each Michigan county (Table XXI-7) was developed from the personal income accounts that are prepared by the Bureau of Economic Analysis, U.S. Department of Commerce. Personal income statistics are discussed in the introduction to chapter VI.

Data on health insurance are included in chapter III.

XXII. FINANCE, INSURANCE, AND REAL ESTATE

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TABLE XXII-1. AVERAGE WAGE AND SALARY EMPLOYMENT AND WEEKLY HOURS AND EARNINGS OF SALES WORKERS IN MICHIGAN AND THE UNITED STATES FINANCE INSURANCE AND REAL ESTATE ESTABLISHMENTS: 1956-1980.

Year	Michigan[a]	United States			
	Employment (000)	Employment (000)	Weekly Hours	Weekly Earnings	Hourly earnings
1956	75.9	2,389	36.9	65.68	1.78
1957	78.0	2,438	36.7	67.53	1.84
1958	78.6	2,481	37.1	70.12	1.89
1959	80.4	2,549	37.3	72.74	1.95
1960	82.8	2,629	37.2	75.14	2.02
1961	84.9	2,688	36.9	77.12	2.09
1962	86.3	2,754	37.3	80.94	2.17
1963	88.2	2,830	37.5	84.38	2.25
1964	90.5	3,911	37.3	85.79	2.30
1965	94.0	2,977	37.2	88.91	2.39
1966	99.8	3,058	37.3	92.13	2.47
1967	105.0	3,185	37.1	95.72	2.58
1968	109.6	3,337	37.0	101.75	2.75
1969	115.5	3,512	37.1	108.70	2.93
1970	119.7	3,645	36.7	112.67	3.07
1971	121.0	3,772	36.6	117.85	3.22
1972	127.7	3,908	36.6	122.98	3.36
1973	130.3	4,046	36.6	129.20	3.53
1974	134.2	4,148	36.5	137.61	3.77
1975	134.0	4,165	36.5	148.19	4.06
1976	136.9	4,271	36.4	155.43	4.27
1977	142.2	4,467	36.4	165.26	4.54
1978	147.4	4,724	36.4	178.00	4.89
1979	154.5	4,975	36.2	190.77	5.27
1980	156.1	5,168	36.2	209.24	5.78

SOURCE: Michigan Employment Security Commission Special release, and Bureau of Labor Statistics, Employment and Earnings, (Washington, D.C.: Monthly), April 1981, Tables B-1 and B-20.

a. Hours and earnings data are not available for Michigan.

TABLE XXII-2. NUMBER OF BANKS, SAVINGS AND LOAN, AND CREDIT UNION OFFICES AND BRANCHES IN MICHIGAN, YEAR END: 1959-1980

	Commercial banks			Savings and loan		Credit unions[b]		
Year	Unit banks	Banks with branches	Total offices[a]	Number of associations	Total offices[a]	State chartered	Federally chartered	Total
1959	261	112	916	73	n.a.	673	423	1,096
1960	246	134	958	73	n.a.	716	417	1,133
1961	230	143	990	73	n.a.	763	411	1,174
1962	221	150	1,042	73	n.a.	782	406	1,188
1963	214	153	1,095	72	n.a.	781	406	1,187
1964	193	168	1,166	72	n.a.	782	408	1,190
1965	176	178	1,247	72	207	790	399	1,189
1966	157	190	1,335	71	210	815	379	1,194
1967	151	190	1,390	71	212	813	368	1,182
1968	145	193	1,439	70	222	818	366	1,184
1969	133	199	1,485	70	239	810	371	1,181
1970	129	202	1,534	68	248	787	372	1,159
1971	122	209	1,685	65	390	754	364	1,118
1972	111	221	1,662	65	307	724	368	1,092
1973	107	233	1,740	65	326	706	363	1,069
1974	98	249	1,827	66	360	679	365	1,044
1975	88	263	1,913	67	400	656	367	1,023
1976	85	275	1,993	66	434	630	358	988
1977	82	280	2,066	66	478	611	352	963
1978	72	293	2,158	65	526	587	350	937
1979	70	302	2,373	65	563	584	345	929
1980	64	312	2,535	65	608	584	340	924

SOURCE: Federal Deposit Insurance Corporation, Annual Report, 1959 through 1978 (Washington, D.C.: annually), Table 103 (1979); Federal Home Loan Bank Board, Trends in the Savings and Loan Field, 1959 through 1970, and Asset and Liability Trends, 1971 through 1976 (Washington, D.C.: annually), Table 8 (1976); Federal Home Loan Bank Board, Savings and Home Financing Source Book (Washington, D.C.: 1979), Table 35; and National Credit Union Administration, Annual Report, 1960 through 1977 (Washington, D.C.: annually), Tables 1 and 17 (1979); Federal Home Loan Bank Board, Summary of Savings Accounts by Geographic Area (Washington, D.C.: 1980), Table 3; Michigan Credit Union League, Annual Report & Statistical Yearbook, 1980.

a. Main offices plus branches.
b. Branch office data are not available.

n.a.: not available.

TABLE XXII-3. YEAR-END ASSETS OF COMMERCIAL BANKS, SAVINGS AND LOAN ASSOCIATIONS, AND CREDIT UNIONS IN MICHIGAN AND THE UNITED STATES: 1961-1980

(In millions of dollars)

	Michigan			United States			Michigan as a percentage of United States		
Year	Commercial[a] banks	Savings & loan assoc.	Credit[b] unions	Commercial[a] banks	Savings & loan assoc.	Credit[b] unions	Commercial[a] banks	Savings & loan assoc.	Credit[b] unions
1961	10,259	2,055	553	277,374	82,135	6,383	3.70	2.50	8.66
1962	11,490	2,356	622	295,983	93,605	7,186	3.88	2.52	8.64
1963	12,358	2,705	709	311,791	107,559	8,131	3.96	2.51	8.72
1964	13,915	3,093	831	345,130	119,355	9,361	4.03	2.59	8.87
1965	15,457	3,341	954	375,394	129,580	10,552	4.12	2.58	9.03
1966	16,977	3,424	1,053	402,946	133,933	11,606	4.21	2.56	9.07
1967	19,108	3,719	1,164	450,713	143,534	12,775	4.24	2.59	9.10
1968	21,190	3,979	1,306	500,238	152,890	14,210	4.24	2.60	9.18
1969	22,684	4,288	1,457	530,715	162,149	15,900	4.27	2.64	9.16
1970	24,456	4,830	1,605	572,682	176,183	17,960	4.27	2.73	8.93
1971	26,568	5,760	1,815	638,010	206,023	21,134	4.16	2.80	8.59
1972	29,078	6,842	2,047	732,519	243,127	24,609	3.97	2.81	8.31
1973	31,627	7,692	2,227	827,081	271,905	28,418	3.82	2.83	7.83
1974	33,147	8,478	2,388	906,385	295,545	31,953	3.66	2.87	7.47
1975	34,585	9,753	2,698	944,656	338,233	37,964	3.66	2.88	7.10
1976	36,914	11,365	2,929	1,004,020	391,907	40,123	3.68	2.90	7.30
1977	41,776	13,257	3,491	1,129,712	459,240	43,451	3.70	2.89	7.43
1978	46,761	15,255	3,971	1,172,773	523,542	51,417	n.a.	2.99	7.11
1979	48,730	16,925	4,150	1,480,300	578,962[c]	65,854	3.29	2.92	6.30
1980	51,661	118,426	4,043	1,702,700	629,829	71,709	3.03	2.93	5.64

SOURCE: Federal Deposit Insurance Corporation, Assets and liabilities, Commercial and Mutual Savings Banks, December 1960-1977 (Washington, D.C.: annually), Table A; Federal Home Loan Bank Board, Trends in the Savings and Loan Field 1958 through 1971, Asset and Liability Trends, 1971 through 1976 (Washington, D.C.: annually), Table 8 (1976); Michigan Department of Commerce, Financial Institutions Bureau, Abstract of Reports of Credit Unions, 1960 through 1976 (Lansing: annually), pp. 3, 5 (1976); Federal Home Loan Bank Board, Savings and Home Financing Source Book (Washington, D.C.: 1978, 1979, and 1980, Table 3; and Federal Home Loan Bank Board, Combined Financial Statements, 1978 (Washington, D.C.: 1979), Tables 1 and 23; Michigan Credit Union League Annual Report & Statistical Yearbook, 1980; National Credit Union Administration, Annual Report, 1979 and 1980; Board of Governors of the Federal Reserve System, Federal Reserve Bulletin, March 1981.

a. Insured and uninsured
b. State and Federal chartered
c. Revised
n.a. not available

TABLE XXII-4 ASSETS OF COMMERCIAL BANKS IN MICHIGAN INSURED BY THE FEDERAL DEPOSIT INSURANCE CORPORATION: 31 DECEMBER 1977, 1978, 1979 AND 1980

(In thousands of dollars)

Assets	1977	1978	1979	1980
Cash and due from depository institutions--total	4,996,595	5,702,205	4,704,133	5,496,594
Currency and coin	704,838	823,976	913,529	896,636
Reserve with Federal Reserve banks	946,015	1,041,921	671,139	569,265
Demand balances with commercial banks in United States	1,200,180	1,320,452	1,085,966	1,228,780
Other balances Aggregate	708,734	656,748	468,404	1,313,208
Cash items and unposted debits	1,436,828	1,809,725	1,519,638	1,488,705
Securities--total	10,322,572	8,661,463	9,325,776	12,611,111
U.S. Treasury securities	3,847,945	3,771,723	3,631,443	4,396,009
Obligations of other U. S. government agencies	978,777	1,114,299	1,345,619	1,635,380
Obligations of states and subdivisions	5,113,961	5,434,597	6,126,548	6,131,150
Other securities	381,889	294,988	262,949	448,572
Federal funds sold and securities purchased under agreements to resell	1,847,065	2,367,628	1,744,550	1,345,764
Loans net	22,813,723	25,725,302	28,091,179	28,517,983
Plus: Reserve for possible loan losses	226,580	252,975	267,714	278,584
Loans--total	23,040,303	25,978,277	28,358,893	28,796,567
Unearned income on loans	556,550	644,318	663,156	525,385
Loans--gross	23,596,853	26,622,595	29,022,049	29,321,950
Real estate loans--total	9,970,909	11,403,530	12,482,877	12,616,327
Construction and land development	368,627	475,632	533,418	514,155
Secured by farmland	197,826	220,190	208,986	200,752
Secured by 1-4 family residential properties	6,886,419	6,180,011	6,700,684	8,745,475

TABLE XXII-4. ASSETS OF COMMERCIAL BANKS IN MICHIGAN INSURED BY THE FEDERAL DEPOSIT INSURANCE CORPORATION: 31 DECEMBER 1977, 1978, 1979, AND 1980 (cont.)

(In thousands of dollars)

Assets	1977	1978	1979	1980
Secured by multifamily (5 or more) res. properties	265,210	271,086	294,578	289,081
Secured by nonfarm nonresidential properties	2,252,827	2,492,038	2,749,401	2,868,855
Loans to financial institutions--total	1,063,315	n.a.	n.a.	1,338,786
REIT's and mortgage companies	334,211	304,899	253,241	n.a.
Domestic commercial banks	32,606	36,695	22,577	n.a.
Banks in foreign countries (includes domestic 1976)	173,902	132,420	127,000	n.a.
Other depository institutions	7,853	n.a.	n.a.	n.a.
Other financial institutions	514,743	n.a.	n.a.	n.a.
Loans for purchasing or carrying securities	307,981	n.a.	n.a.	88,731
Loans to farmers	377,522	395,203	409,318	392,380
Commercial and industrial loans (incl. open market paper)	5,664,230	6,137,707	7,072,743	7,935,960
Loans to individual--total	5,437,584	n.a.	n.a.	6,191,605
Automobile installment loans	2,231,665	2,758,727	2,997,498	2,372,272
Credit cards	798,134	993,499	1,101,579	1,106,270
Other retail consumer installment loans:				
Mobile homes, not including travel trailers	281,342	298,932	323,246	299,142
Other installment loans aggregate	1,521,688	1,443,178	1,643,010	1,762,640
Single-payment loans for personal expenditures	604,756	661,906	686,839	662,866
All other loans	775,312	798,469	585,374	763,880
TOTAL LOANS AND SECURITIES	33,136,295	34,639,740	37,684,469	41,129,094

TABLE XXII-4. ASSETS OF COMMERCIAL BANKS IN MICHIGAN INSURED BY THE FEDERAL DEPOSIT INSURANCE CORPORATION: 31 DECEMBER 1977, 1978, 1979 AND 1980 (cont.)

(In thousands of dollars)

Assets	1977	1978	1979	1980
Direct lease financing	65,965	145,843	161,067	237,869
Bank premises furniture and fixtures	639,032	725,493	822,634	897,[illegible]
Real estate owned, other than bank premises	77,973	68,325	57,939	61,686
Investments in subsidiaries not consolidated	68,668	5,227	20,364	n.a.
Customers' liabilities on acceptances outstanding	84,086	250,493	364,440	n.a.
Other assets	860,815	1,005,058	1,236,019	2,492,650
TOTAL ASSETS	41,776,494	46,748,342	48,712,698	51,660,899

SOURCE: Federal Deposit Insurance Corporation, Assets and Liabilities, Commercial and Mutual Savings Banks, 1977 (Washington, D.C.: annually), Table 7 (1977); and special release.

NOTE: One Michigan commercial bank is not insured.

n.a.: not available.

TABLE XXII-5. LIABILITIES AND EQUITY CAPITAL OF ALL COMMERCIAL BANKS IN MICHIGAN: 31 DECEMBER 1977, 1978, 1979, AND 1980.

(In thousands of dollars)

Liabilities, reserves, and capital accounts	1977	1978	1979	1980
Business and personal deposits--total	31,585,775	31,811,519	32,300,059	37,398,177
Individuals, partnerships, and corporations--demand	8,815,778	9,339,960	9,008,467	8,529,128
Individuals, partnerships, and corporations--savings	12,169,240	12,089,162	10,848,895	10,468,599
Individuals and nonprofit organizations--savings	11,628,403	9,325,887	8,253,891	10,044,492
Corporations and other profit organizations--savings	540,837	561,531	466,960	424,107
Individuals, partnerships, and corporations--time	9,836,391	9,492,771	11,786,924	17,676,116
Deposits accumulated for payment of personal loans	409	462	0	0
Certified and officers' checks, letter of credit, travelers' checks, and so forth	763,957	889,164	655,773	724,334
Government deposits--total	3,948,793	4,534,183	3,969,885	3,528,376
U.S. government--demand	307,089	115,228	74,018	61,469
U.S. government--savings	591	153	0	12
U.S. government--time	2,046	2,751	3,966	3,961
States and subdivisions--demand	708,994	743,166	659,884	625,812
States and subdivisions--savings	620,599	526,835	437,268	395,267
States and subdivisions--time	2,309,474	3,146,050	2,794,749	2,441,855
Other demand, aggregate	513,554	607,073	557,283	623,892
Commercial banks in the United States	478,589	541,988	519,382	n.a.
Mutual savings banks in the United States	443	29	57	n.a.
Foreign governments, central banks, itc.	606	391	458	n.a.
Banks in foreign countries	33,916	64,665	37,386	n.a.
Other savings, aggregate	227	20,732	9	584
Commercial banks in the United States	227	30	9	n.a.
Mutual savings banks in the United States	0	702	0	n.a.
Foreign governments, central banks, etc.	0	0	0	n.a.
Banks in foreign countries	0	0	0	n.a.
Other time, aggregate	45,393	80,188	37,009	66,011
Commercial banks in the United States	27,103	52,918	19,009	n.a.
Mutual savings banks in the United States	500	0	0	n.a.
Foreign governments, central banks	8,270	7,270	18,000	n.a.
Banks in foreign countries	9,520	20,000	0	n.a.
TOTAL DEPOSITS	36,093,742	39,254,214	39,797,191	41,714,481
Demand	11,109,372	11,696,353	10,962,516	10,662,076
Savings and time	24,984,370	27,557,861	28,834,675	31,052,399

TABLE XXI-5. LIABILITIES AND EQUITY CAPITAL OF ALL COMMERCIAL BANKS IN MICHIGAN: 31 DECEMBER 1977, 1978, 1979, AND 1980.

(In thousands of dollars)

Liabilities, reserves, and capital accounts	1977	1978	1979	1980
Miscellaneous liabilities--total	2,648,185	3,509,608	4,744,214	6,680,937
Federal Funds purchased (borrowed) and securities sold under agreements to repurchase	1,919,900	2,490,617	3,367,741	4,300,355
Other liabilities for borrowed money	59,733	71,525	103,618	590,610
Mortgage indebtedness	21,704	59,787	62,505	63,099
Acceptances oustanding	84,086	250,493	364,440	405,288
Other liabilities	562,762	637,186	825,910	1,321,585
TOTAL LIABILITIES	38,741,927	43,431,147	45,219,855	47,990,130
Reserves for loans and securities[a]	0	0	0	0
Subordinated notes and debentures	199,808	211,503	209,453	195,822
Equity capital--total	2,834,759	3,105,692	3,283,390	3,474,946
Preferred stock--par value	2,190	2,040	2,040	2,260
Common stock--par value	577,282	621,880	651,041	690,269
Surplus	1,137,437	1,209,636	1,215,206	1,251,671
Undivided profits	1,069,221	1,019,164	1,111,466	1,530,749
Reserve for contingencies and other capital reserves	48,629	25,206	26,215	31,700
TOTAL LIABILITIES AND EQUITY CAPITAL	41,776,494	48,151,486	50,201,468	53,398,638

SOURCE: Federal Deposit Insurance Corporation, Assets and Liabilities, Commercial and Mutual Savings Banks, 1977 (Washington, D.C.: annually), Table 7 (1977): and special release.
NOTE: One Michigan Commercial bank is not insured.
a. Reserves for loan losses are listed as part of assets in 1977.

TABLE XXII-6 NUMBER OF BANKS OPERATING IN AND BANKING OFFICES LOCATED IN MICHIGAN, BY COUNTY: 30 JUNE 1980

County	Banks	Banking offices	County	Banks	Banking offices
Alcona	2	3	Lake	1	2
Alger	3	6	Lapeer	8	21
Allegan	9	22	Leelanau	3	6
Alpena	3	13	Lenawee	12	34
Antrim	7	9	Livingston	9	23
Arenac	5	7	Luce	2	2
Baraga	2	2	Mackinac	3	7
Barry	6	7	Macomb	25	147
Bay	9	42	Manistee	2	9
Benzie	4	5	Marquette	7	23
Berrien	11	55	Mason	3	8
Branch	3	15	Mecosta	4	15
Calhoun	9	35	Menominee	5	9
Cass	5	14	Midland	5	18
Charlevoix	5	10	Missaukee	3	4
Cheboygan	2	10	Monroe	8	29
Chippewa	4	12	Montcalm	9	16
Clare	3	7	Montmorency	2	3
Clinton	5	16	Muskegon	7	30
Crawford	2	5	Newaygo	7	9
Delta	6	14	Oakland	40	274
Dickinson	5	12	Oceana	4	7
Eaton	9	22	Ogemaw	4	5
Emmet	6	13	Ontonagon	3	5
Genesee	11	100	Osceola	5	6
Gladwin	3	6	Oscoda	1	2
Gogebic	4	7	Otsego	2	5
Grand Traverse	5	29	Ottawa	15	50
Gratiot	5	13	Presque Isle	4	4
Hillsdale	6	13	Roscommon	2	7
Houghton	5	13	Saginaw	9	60
Huron	9	18	St. Clair	9	38
Ingham	13	68	St. Joseph	10	27
Ionia	7	17	Sanilac	8	17
Iosco	3	10	Schoolcraf	2	4
Iron	4	8	Shiawassee	7	21
Isabella	7	18	Tuscola	12	21
Jackson	7	42	Van Buren	8	17
Kalamazoo	8	67	Washtenaw	14	79
Kalkaska	3	4	Wayne	28	434
Kent	22	142	Wexford	3	13
Keweenaw	1	1	TOTAL	563	2,443

SOURCE: Federal Deposit Insurance Corporation, Summary of Deposits in all Commercial and Mutual Savings Banks, June 30, 1980 (Washington D.C.: 1980).

NOTE: Several banks operate in more than one county.

TABLE XXII-7. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS" EARNINGS IN FINANCE, INSURANCE, AND REAL ESTATE AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979

	Labor and proprietors' earnings in finance, insurance, and real estate establishments			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Livingston	7.55	18,410	7.02	20,196
Lake	6.82	840	6.54	876
Oakland	6.18	477,677	6.14	544,554
Calhoun	(D)	(D)	5.58	59,828
Gladwin	5.78	2,156	5.43	2,471
Roscommon	5.47	2,162	5.14	2,310
Grand Traverse	4.74	15,888	4.95	18,816
Missaukee	4.98	1,097	4.81	1,267
Houghton	6.48	7,874	4.78	6,395
Montmorency	3.85	783	4.65	998
Ingham	4.40	114,831	4.57	134,842
Wayne	4.39	924,947	4.40	992,294
Kent	4.44	139,215	4.34	158,806
Clinton	4.23	5,061	4.14	5,606
Iron	4.24	1,892	4.09	2,022
Crawford	3.43	1,056	3.99	1,177
Cheboygan	4.11	3,035	3.89	3,335
Barry	(D)	(D)	3.78	5,372
Wesford	3.70	4,342	3.70	4,877
Emmet	3.60	3,983	3.68	4,606
Chippewa	3.59	3,593	3.59	3,817
St. Clair	3.19	17,729	3.55	20,926
Clare	3.37	1,885	3.54	2,252
Eaton	3.51	6,360	3.38	6,878
Newaygo	3.15	2,982	3.34	3,370
Saginaw	3.20	55,355	3.30	62,206
Cass	3.22	5,395	3.24	5,826
Berrien	3.11	31,201	3.23	34,359
Delta	3.06	5,108	3.13	5,821
Mecosta	3.02	3,145	3.13	3,621
Menominee	3.22	3,116	3.11	3,415
Gogebic	3.16	1,841	3.00	1,964
Kalamazoo	3.04	45,663	3.00	51,180
Shiawassee	3.09	7,116	2.98	7,991
Otsego	2.47	1,869	2.94	2,587

TABLE XXII-7. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN FINANCE, INSURANCE, AND REAL ESTATE AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979 (cont.)

	Labor and proprietors' earnings in finance, insurance, and real estate establishments			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Charlevoix	2.94	2,558	2.91	2,859
Iosco	2.81	3,304	2.87	3,648
Bay	2.71	15,740	2.84	17,928
Manistee	2.67	2,642	2.83	3,065
Lapeer	2.70	5,887	2.76	6,500
Jackson	2.55	22,939	2.69	26,716
Monroe	2.58	11,968	2.69	13,606
Gratiot	2.59	5,175	2.68	17,928
Ionia	2.47	4,668	2.65	5,362
Sanilac	2.56	3,630	2.65	4,296
Lenawee	2.65	11,595	2.64	12,990
Benzie	2.61	968	2.58	1,056
Schoolcraft	2.67	867	2.57	933
Huron	2.47	3,956	2.50	4,610
Mason	2.48	2,693	2.47	3,046
Montcalm	2.30	4,174	2.44	4,779
Isabella	2.32	4,808	2.40	5,471
Oscoda	(D)	(D)	2.38	360
Branch	2.33	4,999	2.36	5,711
Muskegon	2.30	20,617	2.35	23,242
Oceana	2.43	1,401	2.32	1,456
Macomb	2.08	93,785	2.30	111,162
Ottawa	2.25	17,920	2.30	21,122
Alger	2.24	669	2.29	755
Osceola	2.23	1,335	2.27	1,522
Antrim	2.22	1,173	2.25	1,332
Marquette	2.23	9,344	2.23	10,256
Mackinac	2.25	869	2.22	946
Van Buren	2.15	4,587	2.20	5,168
Genesee	2.10	81,532	2.19	91,284
St. Joseph	2.28	6,225	2.18	6,893
Washtenaw	1.95	48,029	2.12	58,462
Dickinson	1.99	2,985	2.07	3,556
Hillsdale	(D)	(D)	2.03	3,862
Ontonagon	2.08	1,066	2.00	1,144

TABLE XXII-7. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS" EARNINGS IN FINANCE, INSURANCE, AND REAL ESTATE AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979 (cont.)

	Labor and proprietors' earnings in finance, insurance, and real estate establishments			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Tuscola	1.98	3,759	2.00	4,409
Presque Isle	1.87	927	1.96	1,120
Ogemaw	1.90	818	1.67	883
Luce	1.46	537	1.45	592
Allegan	1.37	3,477	1.40	3,948
Midland	1.28	7,671	1.34	9,012
Alcona	(D)	(D)	.95	189
Alpena	(D)	(D)	(D)	(D)
Arenac	(D)	(D)	(D)	(D)
Baraga	(D)	(D)	(D)	(D)
Kalkaska	(D)	(D)	(D)	(D)
Keweenaw	(D)	(D)	(D)	(D)
Leelanau	(D)	(D)	(D)	(D)
Michigan	3.82	2,410,825	3.88	2,687,485
United States	5.78	76,313,000	5.81	86,326,000

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

NOTE: Counties are ranked according to this sector's relative contribution to total labor and proprietors' earnings during 1978 (next-to-last column). These numbers pertain to earnings generated within the county, irrespective of the residence of the people who received them. For a complete tabulation of earnings at the state level, see Tables VI-2 and VI-3. The earnings residence adjustment fo all counties is shown in Table VI-12.

(D): Withheld to avoid disclosing data for individual companies.

TABLE XXII-8. RANKING OF MICHIGAN COUNTIES ACCORDING TO PERCENTAGE CHANGE IN EARNINGS IN FINANCE, INSURANCE, AND REAL ESTATE: 1978-1979

	Percentage change			Percentage change	
County	1974-1979	1978-1979	County	1974-1979	1978-1979
Otsego	198	38	Shiawassee	109	12
Montomrency	129	27	Wexford	123	12
Washtenaw	107	22	Clinton	152	11
Presque Isle	137	21	Crawford	131	11
Clare	67	19	Gratiot	80	11
Dickinson	129	19	St. Joseph	60	11
Macomb	192	19	Berrien	94	10
Grand Traverse	146	18	Cheboygan	92	10
Ottawa	125	18	Iosco	137	10
Sanilac	93	18	Lapeer	91	10
St. Clair	94	18	Livingston	111	10
Huron	41	17	Luce	76	10
Ingham	96	17	Marquette	93	10
Tuscola	136	17	Menominee	190	10
Emmet	134	16	Benzie	91	9
Jackson	97	16	Mackinac	134	9
Manistee	114	16	Cass	170	8
Gladwin	40	15	Eaton	103	8
Ionia	85	15	Ogemaw	86	8
Mecosta	92	15	Schoolcraft	52	8
Missaukee	106	15	Iron	94	7
Allegan	134	14	Gogebic	53	7
Antrim	76	14	Ontonagon	67	7
Bay	102	14	Roscommon	102	7
Branch	87	14	Wayne	33	7
Delta	59	14	Chippewa	84	6
Isabella	127	14	Lake	118	4
Kent	98	14	Oceana	84	4
Monroe	116	14	Houghton	24	(-19)
Montcalm	95	14	Arnac	(D)	(D)
Oakland	220	14	Alcona	(D)	(D)
Osceola	127	14	Alpena	(D)	(D)
Alger	56	13	Baraga	(D)	(D)
Mason	60	13	Barry	(D)	(D)
Muskegon	69	13	Calhoun	(D)	(D)
Newaygo	86	13	Hillsdale	(D)	(D)
Van Buren	82	13	Kalkaska	(D)	(D)
Charlevoix	127	12	Keweenaw	(D)	(D)
Genesee	106	12	Leelanau	(D)	(D)
Kalamazoo	97	12	Oscoda	(D)	(D)
Lenawee	104	12			
Midland	100	12	Michigan	81	11
Saginaw	99	12	United States	72	15

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.
NOTE: Counties are ranked according to this sector' relative contribution to total labor and proprietors' earnings during 1977. These numbers pertain to earnings generated within the county, irrespective of the residence of the people who received them. For a complete tabulation of earnings at the state level, see Table VI-2 and VI-3. The earnings residence adjustment for all counties is shown in Table VI-12.
(D): Withheld to avoid disclosing data for individual companies.

TABLE XXII-9 DEPOSITS IN COMMERCIAL BANKS AND BANKING OFFICES IN MICHIGAN, BY TYPE OF DEPOSIT, BY COUNTY: 30 JUNE 1980

(In thousands of dollars)

County	Demand[a]	Savings	Other time[a]	State and local government		All Other	Total[b]
				Demand	Time and savings		
Alcona	$ 3,399	$ 8,126	$ 11,170	$ 255	$ 1,541	$ 109	$ 24,600
Alger	3,965	10,511	16,919	701	2,148	372	34,616
Allegan	36,852	57,088	83,588	2,865	15,011	743	196,147
Alpena	17,801	43,035	66,676	4,959	15,668	2,244	150,383
Antrim	10,370	20,998	30,282	1,166	5,107	533	68,456
Arenac	8,095	16,282	30,275	1,035	3,068	442	59,197
Baraga	5,339	9,101	14,686	1,439	1,516	300	32,381
Barry	16,274	27,722	27,623	1,378	9,665	405	83,067
Bay	80,251	146,459	177,766	16,910	14,361	3,814	439,561
Benzie	6,920	15,563	23,197	681	3,330	460	50,151
Berrien	127,905	107,422	245,675	10,726	61,594	7,913	561,235
Branch	24,205	35,110	72,442	3,465	20,669	1,964	157,855
Calhoun	100,140	128,971	175,864	8,360	44,619	23,318	481,272
Cass	20,963	31,137	54,860	4,434	11,801	921	124,116
Charlevoix	16,946	25,617	42,105	1,466	4,819	452	91,405
Cheboygan	13,860	26,501	36,710	2,244	3,326	656	83,297
Chippewa	17,765	35,408	57,992	4,854	8,153	1,331	125,503
Clare	14,257	25,497	41,848	3,229	4,532	681	90,044
Clinton	20,261	37,460	58,758	2,469	18,460	1,305	138,713
Crawford	5,316	8,290	11,971	617	3,655	399	30,248
Delta	23,420	84,462	50,357	2,291	16,341	1,181	178,052
Dickinson	22,309	30,106	55,149	2,407	4,956	873	115,800
Eaton	35,825	70,260	94,995	5,342	17,704	2,203	226,329
Emmet	22,511	38,680	85,099	1,611	14,285	2,566	164,752
Genesee	267,287	564,278	729,395	38,210	195,931	25,548	1,820,649

TABLE XXII-9 DEPOSITS IN COMMERCIAL BANKS AND BANKING OFFICES IN MICHIGAN, BY TYPE OF DEPOSIT, BY COUNTY: 30 JUNE 1980 (cont.)

(In thousands of dollars)

County	Demand[a]	Savings	Other time[a]	State and local government		All Other	Total[a]
				Demand	Time and savings		
Gladwin	$ 7,051	$ 17,745	$ 23,667	$ 1,341	$ 5,928	$ 375	$ 56,107
Gogebic	14,079	28,761	50,734	2,209	4,195	973	100,951
Grand Traverse	64,080	85,262	167,419	4,427	29,752	8,157	359,097
Gratiot	39,239	56,426	84,279	3,527	11,201	750	195,422
Hillsdale	25,017	42,379	80,443	3,257	9,525	1,158	161,779
Houghton	24,159	33,259	59,025	3,322	6,252	826	126,843
Huron	27,798	57,243	117,048	3,656	14,056	1,185	220,986
Ingham	301,024	314,064	430,973	16,630	65,541	31,394	1,159,626
Ionia	22,207	41,456	77,050	3,150	13,732	1,480	159,075
Iosco	11,741	30,541	34,754	2,182	7,047	1,078	87,343
Iron	9,304	18,529	31,978	2,084	3,401	309	65,605
Isabella	27,839	43,356	62,841	2,376	4,911	1,598	142,921
Jackson	121,276	139,931	170,470	9,058	40,604	4,895	486,235
Kalamazoo	176,545	189,850	285,055	13,009	40,217	12,833	717,509
Kalkaska	4,416	10,572	13,578	376	4,060	131	33,133
Kent	470,699	506,417	904,497	14,624	143,519	68,802	2,108,558
Keweenaw	484	1,516	1,913	293	617	0	4,823
Lake	2,499	5,331	3,264	597	475	120	12,286
Lapeer	30,623	57,303	91,462	7,432	12,770	1,673	201,263
Leelanau	4,716	13,221	19,592	424	5,489	26	43,468
Lenawee	67,586	116,755	170,349	7,879	30,668	3,689	396,926
Livingston	46,518	66,113	88,029	3,893	24,906	4,804	234,263
Luce	3,423	6,503	7,716	530	2,501	111	20,784
Mackinac	6,412	10,387	14,583	833	2,630	316	35,161
Macomb	378,212	779,627	1,016,697	28,804	209,437	25,837	2,438,614

TABLE XXII-9. DEPOSITS IN COMMERCIAL BANKS AND BANKING OFFICES IN MICHIGAN, BY TYPE OF DEPOSIT, BY COUNTY: 30 JUNE 1980 (cont.)

(In thousands of dollars)

County	Demand[a]	Savings	Other time[a]	State and local government Demand	State and local government Time and savings	All Other	Total[b]
Manistee	$ 6,912	$ 23,322	$ 22,075	$ 1,095	$ 4,963	$ 525	$ 58,892
Marquette	41,983	72,293	135,511	6,724	46,804	4,495	307,810
Mason	16,160	23,303	52,758	1,187	5,724	850	99,982
Mecosta	20,670	26,899	48,005	2,101	9,640	729	108,044
Menominee	16,679	27,466	44,596	2,209	6,717	984	98,651
Midland	52,324	72,480	105,100	3,319	29,916	3,343	266,482
Missaukee	4,760	13,440	16,074	762	3,007	192	38,235
Monroe	53,315	120,148	147,356	12,103	46,048	6,726	385,696
Montcalm	26,078	44,368	90,073	3,994	10,924	902	176,339
Montmorency	4,104	11,499	18,423	373	3,373	256	38,028
Muskegon	68,145	116,990	156,509	5,653	24,453	4,624	376,370
Newaygo	15,683	27,263	47,833	1,856	7,542	869	101,046
Oakland	1,024,092	1,345,560	2,019,129	48,217	313,415	46,019	4,796,432
Oceana	10,359	16,288	28,634	1,141	6,195	419	63,036
Ogemaw	11,596	19,738	26,611	1,391	5,461	322	65,119
Ontonagon	6,894	9,794	14,275	649	3,751	152	35,515
Osceola	7,758	18,701	25,241	1,279	3,882	770	57,631
Oscoda	2,657	7,416	10,076	479	2,053	0	22,681
Otsego	10,565	21,390	29,345	402	5,844	1,056	68,602
Ottawa	114,671	169,919	267,828	8,224	63,646	6,159	630,447
Presque Isle	5,973	15,780	23,518	1,229	2,819	228	49,547
Roscommon	9,894	26,364	38,944	1,503	7,558	672	84,935
Saginaw	167,168	267,007	318,069	14,396	64,437	19,219	850,296
St. Clair	80,355	166,277	278,224	11,002	35,221	4,986	576,065
St. Joseph	38,371	58,124	98,157	3,162	12,324	1,517	211,655

TABLE XXII-9. DEPOSITS IN COMMERCIAL BANKS AND BANKING OFFICES IN MICHIGAN, BY TYPE OF DEPOSIT, BY COUNTY: 30 JUNE 1980 (cont.)

(In thousands of dollars)

County	Demand[a]	Savings	Other time[a]	State and local government		All Other	Total[b]
				Demand	Time and savings		
Sanilac	$ 21,821	$ 48,625	$ 92,427	$ 4,254	$ 15,402	$ 1,344	$ 183,873
Schoolcraft	6,165	13,188	22,117	1,578	3,400	658	47,106
Shiawasse	35,046	74,750	115,623	4,678	19,310	2,836	252,243
Tuscola	30,537	60,768	94,387	3,688	17,984	937	208,301
Van Buren	33,328	54,060	81,038	5,967	14,761	910	190,064
Washtenaw	231,517	254,174	300,870	34,698	131,603	13,997	966,859
Wayne	3,366,522	3,195,944	4,716,688	276,848	772,262	958,916	13,287,180
Wexford	16,296	41,780	77,013	2,025	8,893	874	146,881
TOTAL	8,367,581	10,741,749	15,865,345	727,213	2,905,026	1,339,739	39,946,686

SOURCE: Federal Deposit Insurance Corporation, Summary of Deposits in all Commercial and Mutual Savings Banks, June 30, 1980 (Washington, D.C.: 1980), special release.

a. Individuals, partnerships, and corporations.

b. Includes U.S. government deposits, deposits of foreign governments, certified checks, and other types of deposits not shown separately.

TABLE XXII-10. NUMBER, ASSETS, FIRST MORTGAGE LOANS, AND SAVINGS CAPITAL OF MICHIGAN INSURED SAVINGS AND LOAN ASSOCIATIONS, 31 DECEMBER: 1951-1980

(In thousands of dollars)

Year	Number of associations	Total assets	Mortage loans and contract	Savings capital
1951	70	457,799	363,600	386,754
1952	72	537,695	423,902	468,165
1953	73	650,738	513,318	572,277
1954	73	772,502	612,860	680,026
1955	73	919,084	735,198	805,887
1956	74	1,057,135	844,050	928,824
1957	74	1,250,075	974,758	1,121,500
1958	73	1,434,317	1,115,464	1,281,532
1959	73	1,643,904	1,292,979	1,456,198
1960	73	1,847,920	1,460,049	1,650,087
1961	73	2,054,557	1,650,398	1,830,714
1962	73	2,356,491	1,893,083	2,100,912
1963	72	2,705,419	2,207,693	2,400,485
1964	72	3,093,414	2,557,042	2,773,569
1965	72	3,340,838	2,845,584	2,944,913
1966	71	3,424,042	2,925,831	2,996,855
1967	71	3,719,205	3,174,279	3,285,199
1968	70	3,979,388	3,417,190	3,508,187
1969	70	4,288,115	3,695,319	3,677,844
1970	68	4,830,457	4,094,409	4,205,130
1971	65	5,759,871	4,898,408	5,012,060
1972	65	6,842,107	5,798,053	6,043,166
1973	65	7,691,953	6,596,649	6,765,835
1974	66	8,478,123	7,224,272	7,334,501
1975	67	9,753,163	8,092,134	8,642,753
1976	66	11,364,523	9,379,124	10,180,818
1977	66	13,263,886	11,052,458	11,768,151
1978	64	15,255,302	12,966,272	13,246,417
1979	64	16,925,000	14,624,000	14,441,000
1980	63	18,426,000	15,414,000	15,937,000

SOURCE: Federal Home Loan Bank Board, *Trends in the Savings and Loan Field*, 1951 through 1970 (name was changed in 1971); *Asset and Liability Trends*, 1971 through 1977 (Washington, D.C.: annually), Table 8, 1977; Federal Home Loan Bank Board, *Savings & Home Financing Source Book*, (Washington, D.C.: annually), Table 8, 1979 and 1980, and special release.

TABLE XXII-11. TOTAL ASSETS OF SAVING AND LOAN ASSOCIATIONS IN MICHIGAN, BY COUNTY: 31 DECEMBER 1978, 1979, AND 1980

County and association[a]	Total assets		
	1978	1979	1980
Alpena			
First Federal S&L, Alpena	40,836,864	44,235,633	49,360,292
Barry			
Hastings S&L, Hastings	26,848,505	28,743,782	30,696,839
Bay			
Mutual S&L, Bay City	369,054,909	412,046,207	451,381,396
Berrien			
First Federal S&L, Niles	127,682,019	131,540,197	b
LaSalle Federal S&L, Buchanan	79,424,103	86,330,526	96,021,472
New Buffalo S&L, New Buffalo	23,936,902	26,315,423	27,334,848
People Savings Assn., Benton Harbor	112,680,971	122,767,899	121,391,925
St. Joseph S&L, St. Joseph	84,962,161	93,726,171	118,107,185
Branch			
Branch County Federal S&L, Coldwater	52,743,949	58,291,694	61,142,891
Calhoun			
Homestead S&L, Albion	16,089,398	17,451,098	20,459,094
Marshall S&L, Marshall	16,433,253	18,280,195	21,315,172
Peoples S&L, Battle Creek	87,027,074	90,593,730	98,367,094
Cass			
First Savings Assn., Dowagiac	52,645,476	56,781,594	60,105,521
Eaton			
Eaton Federal S&L, Charlotte	55,332,418	60,100,050	67,934,275
Genesee			
First Federal S&L, Flint	183,674,848	204,991,470	214,872,296
Grand Traverse			
Northwestern S&L, Traverse City	56,705,241	68,075,718	75,224,766
Houghton			
Detroit & Northern S&L, Hancock	761,883,000	845,849,231	912,121,210
Ingham			
Capitol S&L, Lansing	443,952,654	471,085,538	489,532,926
First State Savings Assn., East Lansing	68,091,179	66,024,901	67,278,224
Union S&L, Lansing	108,615,120	112,967,951	120,697,927
Ionia			
Belding S&L, Belding	10,690,880	11,612,514	12,449,329
Iron			
Iron S&L, Iron River	5,461,419	5,845,015	6,263,206
Jackson			
First Federal S&L, Jackson	93,509,368	100,465,909	107,954,006
Security S&L, Jackson	124,015,360	135,829,995	147,703,961
Kalamazoo			
Fidelity Federal S&L, Kalamazoo	138,459,913	146,643,031	161,904,404
First Federal S&L, Kalamazoo	290,174,565	298,555,578	329,121,385
Kalamazoo S&L, Kalamazoo	136,033,374	145,131,326	b

TABLE XXII-11. TOTAL ASSETS OF SAVING AND LOAN ASSOCIATIONS IN MICHIGAN, BY COUNTY: 31 DECEMBER 1978, 1979, AND 1980 (cont.)

County and association[a]	Total assets 1978	1979	1980
Kent			
Grand Rapids Mutual Federal S&L, Grand Rapids	159,523,746	177,547,693	187,965,573
Kentwood S&L, Kentwood	33,050,000	39,895,416	43,926,971
Lowell S&L, Lowell[c]	7,644,000	6,485,065	b
Mutual Home Federal S&L, Grand Rapids	289,891,064	303,319,227	318,424,336
West Side Federal S&L, Grand Rapids	58,479,672	60,465,255	64,330,155
Lenawee			
First Federal S&L, Adrian	132,885,474	142,908,180	156,791,719
Livingston			
First Federal S&L, Howell	127,614,014	136,011,905	146,975,081
Macomb			
Macomb S&L, St. Clair Shores	14,052,802	15,414,675	16,706,385
Mason			
Ludington Federal S&L, Ludington	26,427,789	27,987,709	29,247,612
Midland			
Wolverine Federal S&L, Midland	62,836,290	66,039,133	67,245,821
Monroe			
Peoples Federal S&L, Monroe	210,713,215	252,369,130	272,051,214
Muskegon			
Muskegon Federal S&L, Muskegon	209,916,209	217,314,271	227,041,521
Oakland			
American Federal S&L, Southfield	744,702,686	869,585,789	865,763,274
First Farmington S&L, Farmington	25,612,905	27,106,472	b
First Federal S&L of Oakland, Pontiac	451,229,850	514,846,589	626,984,998
Metropolitan Savings Assn., Farmington	327,838,721	366,733,944	412,931,360
Standard Federal S&L, Troy	2,467,173,763	2,871,660,145	3,317,190,580
Surety Federal S&L, Southfield	133,544,457	148,973,804	145,452,184
Ottawa			
Ottawa S&L, Holland	129,540,256	144,598,510	161,381,682
Saginaw			
First S&L, Saginaw	485,498,941	534,656,883	622,207,205
Landmark S&L, Saginaw	34,987,200	49,752,205	50,921,905
Familan Federal S&L, Saginaw	338,162,438	371,157,180	383,596,428
St. Clair			
Citizens Federal S&L, Port Huron	176,693,441	190,019,654	201,543,407
St. Joseph			
Sturgis S&L, Sturgis	43,360,950	47,243,969	48,588,717
Three Rivers S&L, Three Rovers	43,360,950	47,243,969	68,167,986
Van Buren			
VAn Buren S&L, South Haven	28,955,778	28,041,013	b
Central State S&L, Mt. Clemens	d	d	6,552,148

TABLE XXII-11. TOTAL ASSETS OF SAVING AND LOAN ASSOCIATIONS IN MICHIGAN, BY COUNTY: 31 DECEMBER 1978, 1979, AND 1980 (cont.)

County and association[a]	Total assets		
	1978	1979	1980
Washtenaw			
Great Lakes Federal S&L, Ann Arbor[b]	678,822,394	750,851,402	825,763,597
First Savings Assn., Ypsilanti	18,181,933	19,263,172	20,886,551
Michigan S&L, Ann Arbor	26,561,492	47,468,364	60,631,356
Wayne			
Colonial Federal S&L, Grosse Pte. Woods	183,496,977	208,148,985	208,251,461
Dearborn Federal S&L, Dearborn	136,534,651	135,512,573	142,454,833
Detroit Federal S&L, Detroit	82,764,280	85,606,894	109,744,942
Down River Federal S&L, Taylor	330,287,091	345,227,644	362,633,313
First Federal S&L, Dearborn	178,744,233	187,296,082	198,076,131
First Federal S&L, Detroit	2,935,576,130	3,278,067,205	3,687,233,719
Guaranty Federal S&L, Wyandotte	135,537,236	145,088,384	148,908,790
Home Federal S&L, Detroit	24,013,644	23,439,412	22,739,494
Peoples Federal S&L, Detroit	168,714,130	172,983,289	175,069,775

SOURCE: Michigan Savings and Loan League, *Facts and Figures* (Lansing: 1977); and Federal Home Loan Bank of Indianapolis, *1978, 1979, and 1980 Roster of Members* (Indianapolis: 1978, 1979, and 1980).

NOTE: S&L stands for savings and loan.

a. There are no savings and loan associations headquartered in counties not listed, although there may be branch offices of Michigan's 65 savings and loan associations in these counties.

b. Merged.

c. Lowell Savings and Loan was uninsured.

d. Central State Savings and Loan formed during 1980.

TABLE XXII-12. MORTGAGE LOANS MADE BY INSURED SAVINGS AND LOAN ASSOCIATIONS IN MICHIGAN: 1959-1980

(In thousands of dollars)

			Other purposes		
Year	Home construction	Home purchase	Construction and purchase of other real property	Refinancing and all other	Total loans
1959	98,266	167,702	70,690[a]		336,658[b]
1960	85,792	151,656	67,961[a]		305,409[b]
1961	80,616	153,593	85,704[a]		319,913[b]
1962	90,230	213,037	91,644[a]		394,911[b]
1963	109,696	270,384	111,685[a]		494,765[b]
1964	130,866	292,713	111,109[a]		534,688[b]
1965	136,624	321,444	128,924[a]		586,992[b]
1966	94,878	207,356	90,641[a]		392,875[b]
1967	107,003	319,044	41,728	86,821	554,596
1968	115,835	345,650	46,189	85,213	592,886
1969	113,206	337,682	60,902	80,226	592,016
1970	97,045	362,068	104,978	83,050	647,140
1971	198,218	689,750	137,024	201,379	1,226,371
1972	232,521	825,513	175,907	240,319	1,474,260
1973	281,041	824,915	142,900	170,910	1,419,766
1974	166,197	681,288	129,048	161,327	1,137,860
1975	174,355	924,529	127,557	200,978	1,427,418
1976	257,075	1,381,946	145,396	269,399	2,053,816
1977	392,000	1,997,000	75,000	357,000	2,821,000
1978	471,000	2,341,000	69,000	356,000	3,237,000
1979	459,000	2,081,000	43,000	298,000	2,881,000
1980	228,000	1,079,000	80,000	253,000	1,560,080

SOURCE: Federal Home Loan Bank Board, Savings and Home Financing Source Book, 1959 through 1980 (Washington, D.C.: annually), Table 15.

a. Amount represents total of "other purposes" category.

b. VA loans included in total.

TABLE XXII-13. NUMBER OF INSURED SAVINGS AND LOAN ASSOCIATIONS OPERATING IN AND OFFICES LOCATED IN MICHIGAN, BY COUNTY: 30 SEPTEMBER 1980

County	Asso-ciations	Offices	County	Asso-ciations	Offices
Alcona	0	0	Lake	0	0
Alger	0	0	Lapeer	3	4
Allegan	5	6	Leelanau	0	0
Alpena	2	4	Lenawee	2	8
Antrim	0	0	Livingston	2	7
Arenac	1	1	Luce	0	0
Baraga	0	0	Mackinac	0	0
Barry	4	4	Macomb	12	45
Bay	3	11	Manistee	1	1
Benzie	0	0	Marquette	1	2
Berrien	6	23	Mason	2	2
Brance	2	4	Mecosta	1	2
Calhoun	5	14	Menominee	1	1
Cass	3	4	Midland	3	6
Charlevoix	2	2	Missaukee	0	0
Chegoygan	1	1	Monroe	3	10
Chippewa	1	1	Montcalm	1	1
Clare	1	1	Montmorency	0	0
Clinton	1	2	Muskegon	4	9
Crawford	1	1	Newaygo	1	1
Delta	1	1	Oakland	12	77
Dickinson	1	1	Oceana	1	1
Eaton	8	11	Ogemaw	1	1
Emmet	2	2	Ontonagon	0	0
Genesee	4	20	Osceola	1	1
Gladwin	1	2	Oscoda	1	1
Gogebic	1	1	Otsego	1	1
Grand Traverse	2	3	Ottawa	7	12
Gratiot	2	3	Presque Isle	1	1
Hillsdale	2	3	Roscommon	1	1
Houghton	1	1	Saginaw	6	23
Huron	2	3	St. Clair	3	10
Ingham	5	17	St. Joseph	4	7
Ionia	3	4	Sanilac	2	3
Iosco	2	2	Schoolcraft	0	0
Iron	1	1	Shiawassee	2	5
Isabella	2	2	Tuscola	3	3
Jackson	3	7	Van Buren	7	8
Kalamazoo	6	23	Washtenaw	5	20
Kalkaska	1	1	Wayne	16	116
Kent	7	30	Wexford	1	1
Keweenaw	0	0			

SOURCE: Federal Home Loan Bank Board, FSLIC Savings and Loan Associations, September 30, 1980, Summary of Savings Accounts by Geographic Area (Washington D.C.: 1980), Table 5.

TABLE XXII-14. STATE AND FEDERALLY CHARTERED CREDIT UNIONS IN MICHIGAN: 31 DECEMBER 1962-1980

Year	Number	Membership	Loans to members	Assets
			(In thousand of dollars)	
		State		
1962	782	569,244	283,280	349,209
1963	781	628,346	323,693	404,687
1964	782	708,587	380,551	484,197
1965	790	772,298	445,437	561,467
1966	815	865,958	448,359	650,104
1967	814	941,305	592,196	746,410
1968	818	1,030,784	694,117	858,573
1969	810	1,112,939	777,181	973,330
1970	787	1,175,788	814,870	1,096,997
1971	754	1,199,578	837,039	1,248,321
1972	724	1,249,293	913,465	1,402,713
1973	706	1,303,827	1,014,893	1,501,612
1974	679	1,309,000	1,059,746	1,603,246
1975	656	1,374,000	1,179,342	1,820,193
1976	630	1,417,587	1,338,991	1,910,592
1977	611	1,501,371	1,650,475	2,297,283
1978	598	1,591,312	1,899,179	2,600,450
1979	584	1,635,898	1,965,000	2,712,000
1980	584	1,506,905	1,958,388	2,648,387
		Federal		
1962	406	464,996	210,471	272,524
1963	406	498,141	237,275	304,391
1964	408	529,832	269,211	346,619
1965	399	558,397	312,176	392,328
1966	379	566,314	323,120	403,258
1967	368	567,350	329,368	417,566
1968	366	581,189	366,425	447,004
1969	371	610,448	408,478	483,522
1970	372	631,940	415,800	507,796
1971	364	654,871	461,374	567,274
1972	368	690,887	520,926	644,033
1973	363	737,751	591,280	724,900
1974	365	779,534	632,718	784,452
1975	367	809,200	710,035	877,520
1976	358	874,040	861,099	1,018,098
1977	352	962,801	1,045,652	1,193,701
1978	350	1,099,838	1,216,740	1,371,054
1979	345	1,195,568	1,211,426	1,437,921
1980	331	921,310	1,058,326	1,545,872

SOURCE: National Credit Union Administration, Annual Report, 1960 through 1980 (Washington, D.C.: annually), Tables 1 and 17 (1978); Michigan Department of Commerce, Financial Institutions Bureau, Abstracts of Reports of Credit Unions, 1960 through 1976; and Michigan Department of Commerce, Financial Institutions Bureau, Annual Report, 1978 (Lansing: annually), pp. 52, 54 (1978).

TABLE XXII-15. NUMBER, LOANS OUTSTANDING, AND AVERAGE INVESTED ASSETS OF MICHIGAN SMALL LOAN COMPANIES: 1960-1980

Year	Number of licensees	Loans outstanding 31 December[a]	Average invested assets[a]
1960	548	177,036	187,369
1961	584	177,369	188,741
1962	603	181,240	186,000
1963	608	248,081	205,070
1964	634	281,583	271,983
1965	655	304,700	301,897
1966	675	323,872	323,615
1967	677	334,674	338,073
1968	691	345,413	347,609
1969	676	357,969	362,409
1970	626	346,625	365,306
1971	595	332,115	381,379
1972	597	395,160	397,046
1973	593	412,348	433,592
1974	550	391,783	445,643
1975	461	349,687	406,339
1976	415	326,921	356,701
1977	387	332,526	351,956
1978	375	341,166	358,333
1979	350	422,111	401,148
1980	271	342,213	402,574

SOURCE: Michigan Department of Commerce, Financial Institutions Bureau, *Analysis and Recapitulation of Reports of Regulatory Loan Licensees*, 1974 and 1978 (Lansing: annually), p. 5 (1978); Michigan Department of Commerce, *Financial Institutions Bureau*, Annual Report 1980.

a. In thousands of dollars.

TABLE XXII-16. ASSETS AND LIABILITIES OF MICHIGAN SMALL LOAN COMPANIES: 31 DECEMBER 1976-1980

(In thousands of dollars)

Assets	1976	1977	1978	1979	1980
Cash on hand and in bank	1,633	1,922	1,860	1,803	1,351
Loans receivable (net of reserve for bad debts)	326,921	332,526	341,166	422,111	342,213
Real estate (less depreciation)	404	326	327	271	314
Furniture, fixtures, and equipment (less depreciation)	1,610	1,501	1,441	1,335	1,267
Deferred charges and prepaid expense	492	537	610	1,493	1,023
Other assets	2,895	2,051	1,753	1,264	1,059
Total assets used in the regulatory loan business	333,955	338,863	347,157	428,277	347,227
Other assets not used in the regulatory loan business	57,073	69,556	87,928	86,786	72,960
TOTAL ASSETS	391,028	408,419	435,085	515,063	420,187
Liabilities					
Accounts and notes payable:					
Bank	8,791	10,075	8,738	8,367	8,434
Due to parent company of affiliate	206,969	221,372	244,375	310,212	244,141
Other short-term notes and accounts	22,378	20,660	21,590	18,236	15,673
Bonds and long-term notes	9,551	11,270	11,244	10,776	8,563
Other liabilities:					
Accrued expenses	464	906	486	642	536
Dealer reserves	1,864	2,031	1,864	1,498	1,552
Other	318	484	462	287	181
Expense reserves:					
Reserves for license and taxes	533	514	445	483	108
Other expense reserves	692	415	408	139	160
Reserve for bad debts	9,753	9,788	9,557	10,885	8,370
Branch office capital	97,673	81,433	106,913	126,201	106,810
Net worth	978	924	861	235	218
Capital stock:					
Preferred	888	762	833	1,154	1,131
Common	6,303	5,821	5,328	3,520	2,807
Appropriated surplus or capital reserves	8,184	8,317	8,813	3,947	11,855
Earned surplus (including undivided profits)	15,154	33,647	13,168	18,481	9,648
TOTAL LIABILITIES AND CAPITAL	391,028	408,419	435,035	515,063	420,187

SOURCE: Michigan Department of Commerce, Financial Institutions Bureau, Analysis and Recapitulation of Reports of Regulatory Loan Licensees, (Lansing: 1976), p. 3; and Michigan Department of Commerce, Financial Institutions Bureau, Annual Report, 1978 (Lansing: annually), p. 85.

TABLE XXII-17. LIFE INSURANCE IN FORCE IN MICHIGAN AND THE UNITED STATES: 31 DECEMBER 1964-1980

(In millions of dollars)

Year	Ordinary	Group	Industrial	Credit	Total
			Michigan		
1964	17,883	15,883	1,444	2,632	37,842
1965	19,645	19,117	1,448	3,247	43,457
1966	21,477	21,332	1,422	3,593	47,824
1967	23,202	23,180	1,381	3,639	51,402
1968	25,177	25,895	1,377	4,060	56,509
1969	27,097	27,936	1,353	4,415	60,801
1970	28,846	31,076	1,321	4,510	65,753
1971	31,012	34,615	1,340	5,131	72,098
1972	33,314	37,602	1,340	5,847	78,103
1973	35,867	43,569	1,318	5,460	86,214
1974	38,188	49,309	1,287	5,306	94,090
1975	40,093	55,184	1,265	5,494	102,036
1976	43,323	61,538	1,218	5,765	111,844
1977	46,995	67,763	1,187	6,031	121,976
1978	51,528	77,264	1,170	7,375	137,337
1979	56,488	89,358	1,187	7,689	154,722
1980	60,406	95,268	1,169	6,477	163,320
			United States		
1964	457,868	253,620	39,833	46,487	797,808
1965	499,638	308,078	39,818	53,020	900,554
1966	541,022	345,945	39,663	58,059	984,689
1967	584,570	394,501	39,215	61,535	1,079,821
1968	633,392	442,778	38,827	68,357	1,183,354
1969	682,453	488,864	38,614	74,598	1,284,529
1970	734,730	551,357	38,644	77,392	1,402,123
1971	792,318	589,883	39,202	81,931	1,503,334
1972	853,911	640,689	39,975	93,410	1,627,985
1973	928,192	708,322	40,632	101,154	1,778,300
1974	1,009,038	827,018	39,441	109,623	1,985,120
1975	1,083,421	904,695	39,423	112,032	2,139,571
1976	1,177,672	1,002,647	39,175	123,569	2,343,063
1977	1,289,321	1,115,047	39,045	139,402	2,582,815
1978	1,425,095	1,243,994	38,080	163,081	2,870,250
1979	1,585,878	1,419,418	37,794	179,250	3,222,340
1980	1,760,474	1,579,355	35,994	165,215	3,541,038

SOURCE: American Council of Life Insurance, Life Insurance Fact Book, 1964 through 1981 (New York, N.Y.: annually).

TABLE XXII-18. PAYMENTS TO LIFE INSURANCE BENEFICIARIES IN MICHIGAN AND THE UNITED STATES: 1968-1980

Year	Ordinary		Group		Industrial		Total	
	Number (000)	Amount ($000)	Number (000)	Amount ($000)	Number (000)	Amount ($000)	Number (000)	Amount ($000)
				Michigan				
1968	35.8	116,400	39.2	158,500	29.6	14,100	104.6	289,000
1969	37.4	130,100	41.5	182,900	29.5	14,800	108.4	327,800
1970	38.0	130,000	40.0	185,500	28.8	15,000	106.8	330,500
1971	37.5	129,800	42.0	210,900	30.0	15,500	109.5	356,200
1972	40.3	143,800	46.6	224,200	28.9	15,600	115.8	383,600
1973	41.5	154,800	51.2	233,900	28.8	16,100	121.5	404,800
1974	41.3	158,800	52.9	250,200	27.0	15,600	121.2	424,600
1975	42.0	162,100	51.5	254,600	27.1	15,600	120.6	432,300
1976	41.7	165,900	50.1	265,000	26.1	15,500	117.9	446,400
1977	43.8	179,100	49.2	307,100	28.6	17,100	121.6	503,300
1978	43.1	190,600	50.2	324,700	26.6	16,600	119.9	531,900
1979	42.3	196,500	48.9	333,800	24.9	15,900	116.1	546,200
1980	42.3	202,700	48.6	370,800	25.4	16,500	116.3	590,000
				United States				
1968	930	3,210,000	746	2,578,100	1,039	421,200	2,715	6,209,300
1969	955	3,424,100	769	2,897,600	1,025	436,400	2,749	6,758,100
1970	960	3,545,600	767	3,026,700	1,014	445,000	2,741	7,017,300
1971	987	3,699,400	761	3,267,400	1,017	456,500	2,765	7,423,300
1972	1,036	4,003,700	810	3,536,700	1,040	466,600	2,886	8,007,000
1973	1,112	4,289,400	884	3,805,900	1,018	476,700	3,014	8,572,000
1974	1,097	4,382,000	938	4,031,200	974	471,900	3,009	8,885,100
1975	1,098	4,473,600	906	4,256,000	922	462,500	2,926	9,192,100
1976	1,110	4,665,400	882	4,452,900	933	475,000	2,925	9,593,300
1977	1,098	4,907,500	860	4,812,900	910	475,300	2,869	10,195,700
1978	1,141	5,338,000	892	5,281,900	927	487,800	2,961	11,107,700
1979	1,120	5,576,400	893	5,708,900	881	480,400	2,894	11,765,700
1980	1,184	6,119,800	910	6,271,000	873	493,600	2,967	12,884,400

SOURCE: American Council of Life Insurance, Life Insurance Fact Book, 1969 through 1981 (New York, N.Y.: annually).

TABLE XXII-19. ASSETS, CAPITAL, AND SURPLUS OF MICHIGAN INSURANCE COMPANIES: 31 DECEMBER 1977, 1978, AND 1979.

Type of company	1977			1978			1979		
	Number of companies	Admitted assets ($000)	Capital surplus ($000)	Number of companies	Admitted assets ($000)	Capital surplus ($000)	Number of companies	Admitted assets ($000)	Capital surplus ($000)
Property & liability ins.									
Stock	18	989,006	314,660	19	1,256,330	404,345	19	1,569,088	491,693
Mutual	29	1,171,889	289,204	28	1,452,060	375,490	28	1,692,002	459,164
Reciprocal exchanges	1	457,006	86,094	1	571,607	138,095	1	641,895	167,291
Farm mutuals	9	3,709	579	6	1,720	0	5	1,834	1,636
Life insurance									
Stock	21	932,941	142,138	20	1,278,334	180,653	22	1,547,704	246,107
Mutual	4	302,720	14,887	4	358,718	16,367	5	432,284	19,585
Fraternal benefit societies	3	120,515	20,374	3	126,460	23,183	3	131,496	24,831
Nonprofit medical, hospital, and dental organizations, and associations	4	749,494	196,256	4	929,135	290,084	3	1,020,613	318,566

SOURCE: Michigan Department of Commerce, Insurance Bureau, Annual Statistical Report.

TABLE XXII-20. SUMMARY OF MICHIGAN PREMIUMS AND LOSSES OF COMPANIES AND SOCIETIES OPERATING IN MICHIGAN: 1978 AND 1979.

(Thousands of dollars)

Type of company	Total direct Michigan premiums[a] 1978	1979	Total direct Michigan losses[b] 1978	1979
Property and liability insurance companies				
Funds and pools, Michigan	100,497	112,609	85,834	87,542
Stock companies, Michigan	386,914	438,862	226,453	246,766
Stock companies, foreign	1,815,343	2,149,471	1,078,719	1,231,395
Mutual companies, Michigan	521,984	602,069	293,669	347,939
Mutual companies, foreign	552,644	607,501	326,040	351,252
Alien companies-U.S. business	14,322	14,261	7,788	8,493
Reciprocal exchanges, Michigan	351,893	371,582	305,985	319,401
Reciprocal exchanges, foreign	55,331	68,172	29,932	40,393
Farm mutuals, Michigan	304	301	143	126
TOTAL[c]	3,798,728	4,364,527	2,354,420	2,633,181
Life insurance companies				
Stock companies				
Life insurance operation, Michigan	136,691	143,854	50,019	53,476
Life insurance operation, foreign	460,478	514,000	278,755	286,099
Casualty operations, Michigan	87,476	84,328	49,856	63,828
Casualty operations, foreign	509,804	559,880	392,936	467,691
Mutual companies				
Life insurance operations, Michigan	41,258	50,703	13,109	14,795
Life insurance operations, foreign	894,652	913,632	602,394	621,993
Casualty operations, Michigan	52,535	61,507	47,848	51,470
Casualty operations, foreign	541,826	574,417	442,752	439,670
Alien companies-U.S. business				
Life insurance operations	88,740	92,973	49,439	55,866
Casualty operations	36,300	40,441	30,034	34,720
Societies				
Life insurance operations, Michigan	3,423	4,159	1,011	960
Life insurance operations, foreign	35,311	41,980	8,445	9,559
Casualty operations, Michigan	39	33	16	12
Casualty operations, foreign	2,440	2,123	1,478	1,107
Michigan-medical, hospital, and dental organizations and associations				
Life insurance operations	36	36	24	15
Casualty (excluding Blue Cross)	50,510	122,856	38,340	47,083
Blue Cross-Blue Shield of Michigan	2,306,190	2,234,656	2,136,297	2,114,643
TOTAL LIFE INSURANCE OPERATIONS	1,660,589	1,715,198	960,740	1,032,244
TOTAL CASUALTY OPERATIONS	3,584,641	3,678,085	3,138,063	3,219,105

SOURCE: Michigan Department of Commerce, Insurance Bureau, Annual Statistical Report 1978 and 1979 (Lansing: 1978 and 1979, Table I, II, III, and IV.

a. Casualty premiums are premiums earned.
b. Property, liability, and casualty losses are losses incurred. Life losses are losses paid.
c. Total does not include farm mutuals.

TABLE XXII-21. RESIDENTIAL AND NONRESIDENTIAL MORTGAGES OWNED BY U.S. LIFE INSURANCE COMPANIES IN MICHIGAN AND THE UNITED STATES: 30 DECEMBER 1965-1980

Year	Farm	Nonfarm F.H.A.	Nonfarm V.A.	Nonfarm conventional	Total
			Michigan (In thousands of dollars)		
1965	39,891	474,470	183,324	1,253,548	1,951,233
1966	42,566	463,379	157,526	1,399,205	2,072,676
1967	45,500	439,500	154,100	1,493,200	2,132,300
1968	43,200	436,900	144,000	1,541,700	2,165,800
1969	38,200	427,200	131,500	1,605,200	2,202,100
1970	36,600	407,000	119,700	1,696,800	2,260,100
1971	35,200	369,400	106,700	1,747,200	2,258,500
1972	33,400	331,900	95,600	1,815,500	2,276,400
1973	31,400	298,300	82,900	1,904,000	2,316,600
1974	30,800	227,100	74,600	2,040,700	2,423,200
1975	34,800	254,100	66,500	2,096,900	2,452,300
1976	49,400	228,500	59,500	2,146,800	2,484,200
1977	50,400	204,700	52,000	2,461,300	2,768,400
1978	54,700	192,800	44,800	2,562,700	2,865,000
1979	n.a.	n.a.	n.a.	n.a.	n.a.
1980	79,600	141,000	35,800	3,038,800	3,295,000
			United States (In thousands of dollars)		
1965	4,823	12,538	6,286	36,366	60,013
1966	5,240	12,852	6,201	40,316	64,609
1967	5,569	12,672	6,122	43,153	67,516
1968	5,801	12,469	5,954	45,749	69,973
1969	5,773	12,271	5,701	48,282	72,027
1970	5,649	12,001	5,394	51,331	74,375
1971	5,601	11,336	5,004	53,555	75,496
1972	5,678	10,512	4,660	56,098	76,948
1973	5,996	9,740	4,402	61,231	81,369
1974	6,327	9,115	4,178	66,614	86,234
1975	6,753	8,502	3,903	70,009	89,167
1976	7,425	7,838	3,603	72,686	91,552
1977	8,842	7,182	3,348	77,476	96,848
1978	10,499	6,705	3,164	85,799	106,167
1979	12,184	6,372	2,975	96,890	118,421
1980	12,958	6,066	2,781	109,275	131,080

SOURCE: American Council of Life Insurance, Life Insurance Fact Book, 1965 through 1981 (New York: annually).

n.a. Not available.

TABLE XXII-22. SALES OF SERIES E AND H SAVINGS BONDS IN MICHIGAN AND THE UNITED STATES: FISCAL YEARS 1954-1980

(In thousands of dollars)

Fiscal year	Sales	
	United States	Michigan
1954	4,652,875	278,602
1955	5,224,513	312,276
1956	5,259,886	327,443
1957	4,612,994	278,650
1958	4,670,138	282,662
1959	4,505,960	242,108
1960	4,307,048	250,600
1961	4,463,728	254,890
1962	4,421,490	238,795
1963	4,518,035	242,017
1964	4,656,422	259,724
1965	3,534,018	276,808
1966	4,650,078	300,249
1967	4,965,355	297,164
1968	4,738,866	283,164
1969	4,549,746	282,256
1970	4,449,211	240,185
1971	5,081,896	289,948
1972	5,939,037	455,433
1973	6,513,577	452,513
1974	6,428,766	446,422
1975	6,826,464	410,311
1976	7,293,244	432,382
1977	7,894,697	536,314
1978	8,026,105	585,559
1979	7,294,796	523,758
1980	4,819,000	n.a.

SOURCE: U.S. Department of the Treasury, *Annual Report*, 1953 through 1967 (Washington, D.C.: annually), and *Statistical Appendix to Annual Report*, 1968 through 1980 (Washington, D.C.: annually): U.S. Treasury Dept., *Treasury Bulletin*, Sept. 1981.

n.a. not available.

TABLE XXII-23. NUMBER OF STOCKBROKER AND SECURITIES DEALER FIRMS IN MICHIGAN AND THE UNITED STATES: 30 SEPTEMBER 1940-1980

Year	Sole proprietorships	Partnerships	Corporations[a]	Total Michigan	Total U.S.
1940	22	26	49	97	6,545
1945	11	20	28	59	4,099
1950	8	24	30	62	3,959
1955	9	17	26	52	4,260
1960	10	19	33	62	5,239
1961	9	17	36	62	5,446
1962	10	17	34	61	5,764
1963	9	13	37	59	5,423
1964	10	13	35	58	4,820
1965	12	14	38	64	4,494
1966	11	12	43	66	4,513
1967	11	14	44	69	4,128
1968	16	10	46	72	4,355
1969	15	10	49	74	4,755
1970	17	9	55	81	5,187
1971	9	6	56	71	4,901
1972	8	5	54	67	4,968
1973	8	4	54	66	4,373
1974	8	3	52	63	3,982
1975	8	4	44	56	3,546
1976	5	5	46	56	5,380
1977	6	5	49	60	5,725
1978	6	4	45	55	6,025
1979	5	4	48	57	6,226
1980	8	4	54	66	6,730

SOURCE: Securities and Exchange Commission, Annual Report, 1940 through 1980 (Washington, D.C.: annually), Part 9, Table 4.

a. Includes all forms of organizations other than sole proprietorships and partnerships.

TABLE XXII-24. NUMBER OF SHAREOWNERS OF PUBLIC CORPORATIONS IN MICHIGAN AND THE UNITED STATES, SELECTED YEARS: 1956-1980

(In thousands of persons)

Year	Michigan	United States
1952	n.a.	6,490
1956	370	8,604
1959	625	12,391
1962	794	16,867
1965	946	19,963
1970	1,403	30,612
1975	1,517	25,270
1980	1,392	29,840

SOURCE: New York Stock Exchange, Fact Book, 1973 (New York, N.Y.: 1979), p. 51.

n.a.: not available.

XXIII. SELECTED SERVICES

The first postwar business census covered the year 1948. Subsequent censuses have been taken twice each decade, with current law authorizing the U.S. Bureau of the Census to conduct canvasses of the nation's industrial and business establishments at five-year intervals covering years ending in 2 and 7. These economic censuses cover construction industries, manufacturing, mining, retail trade, selected services, selected transportation, and wholesale trade.

Each establishment is classified on the basis of its major economic activity. Those primarily engaged in furnishing lodging, or lodging and meals, and camping space or camping facilities, on a fee basis; providing services generally involved in the care of the person or apparel, such as laundries, dry cleaning plants, portrait photographic studios, and beauty and barber shops; rendering services to business establishments on a fee or contract basis; furnishing automotive repair, leasing, and parking and other repair services to the general public; producing, distributing, or exhibiting motion pictures in commercially operated theaters; providing other amusement or entertainment on payment of a fee or admission charge; making dentures and artificial teeth to order for the dental profession; offering legal advice or legal services (providing that the head of the organization or office is a member of the bar); or rendering engineering, architectural, and surveying services were classified in the Census of Selected Service Industries, 1977. The tabulations exclude such establishments that are part of a military post, school, university, and so forth. Many service establishments, such as hospitals, physicians' offices, and educational institutions, are not covered in the Census of Selected Service Industries.

Beginning in 1954, the Census of Selected Service Industries has excluded firms with no paid employees during the census year unless they reported sales of $1,000 or more. Firms with no paid employees were not actually canvassed, their sales figures and kind-of-business classification being obtained from 1972 income tax returns.

Several changes were made in the kind-of-business definitions between 1967 and 1972 with the result that comparability between the two censuses is limited. The kinds of business involving the most significant changes are those in the new computer and data processing services category. In Table XXIII-3 the 1972 Census of Selected Services Industries aggregates for the state are reported on the basis of the 1967 classification as well as that now current. The 1977 data are based on 1972 kind-of-business definitions only. A complete listing of the kinds of business included during 1972 and 1977 is presented in Table XXIII-6.

It is customary in an economic census to classify each establishment separately, irrespective of whether it is part of a larger organization.

Receipts reported in the Census of Selected Service Industries do not include receipts incidental to other kinds of business, such as wholesaling or services. They do include total receipts, including accruals, of selected service establishments even though some of these receipts were from selling merchandise, carrying charges, delivering merchandise, and so forth. Trade-in allowances are not deducted, but refunds and allowances for merchandise returned are. Sales and excise taxes are included, but nonoperating income (rental or real estate, interest or dividends on investments, and so forth) is not. Receipts include receipts so defined of all establishments with a sales volume of $1,000 or more at any time during the year, whereas the number of establishments in the Census of Retail Trade excludes those that have gone out of business during the year. The census also includes establishments in operation less than the full year, with reported sales of less than $1,000, if they could have expected reaching the $1,000 cutoff on the basis of year-round operation.

Payroll is as defined by the Internal Revenue Service. It includes wages and salaries, gratuities reported to the employer, commissions, bonuses, vacation and sick leave pay before deducting employee income taxes, Social Security taxes, union dues, and so forth. Payments in kind, such as free restaurant meals, are included.

Employment for the pay period including 12 March 1972 consists of paid employees of corporations and unincorporated businesses, including salaried officers and executives of corporations but excluding proprietors and partners of unincorporated businesses. Employees on paid sick leave or holiday or on paid vacation also are included.

The Michigan Department of Licensing and Regulations provides statistics on the number of establishments licensed to do business as barber shops, beauty shops, and funeral parlors, and on the number of people licensed to practice cosmetology, barbering, and mortuary science.

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TABLE XXIII-1. AVERAGE WAGE AND SALARY EMPLOYMENT IN MICHIGAN AND THE UNITED STATES SERVICE ESTABLISHMENTS: 1956-1980

Year	Michigan Employment (000)	United States Employment (000)
1956	234.4	6,497
1957	241.2	6,708
1958	244.6	6,765
1959	244.4	7,087
1960	263.7	7,378
1961	270.8	7,620
1962	286.6	7,982
1963	298.2	8,277
1964	310.5	8,660
1965	326.7	9,036
1966	353.0	9,498
1967	376.8	10,045
1968	385.5	10,567
1969	402.9	11,169
1970	407.8	11,548
1971	420.1	11,797
1972	454.6	12,276
1973	489.0	12,857
1974	510.1	13,441
1975	514.4	13,892
1976	541.2	14,551
1977	580.5	15,303
1978	613.9	16,252
1979	626.8	17,078
1980	645.1	17,741

SOURCE: Michigan Employment Security Commission Special release, and Bureau of Labor Statistics, Employment and Earnings, Washington, D.C.: Montly), April 1981, Table B-1.

TABLE XXIII-2. COMPARATIVE MICHIGAN SELECTED SERVICE INDUSTRY STATISTICS: 1972-1977

Kind of business	Michigan receipts as a percentage of U.S. receipts		Percentage increase in receipts 1972-1977	
	1972	1977	Michigan	U.S.
Passenger car leasing	n.a.	10.7	452.2	n.a.
Commercial research & dev. labs.	n.a.	9.8	n.a.	n.a.
Utility & recreational vehicle rental	n.a.	9.7	170.0	n.a.
Packaging & labeling service	n.a.	8.5	86.8	n.a.
Bowling alleys	8.8	8.4	44.9	51.2
Public golf course, exc. municipal	7.5	8.0	69.5	59.4
Exhaust system service (muffler shop)	6.8	7.5	135.1	115.0
Automotive services, except repair	7.3	7.2	82.2	84.9
Glass replacement & repair	7.0	6.4	53.3	69.6
Lawnmower, saw, knife, tool sharpening & repair	6.2	6.2	57.1	55.9
Diaper service	n.a.	6.1	90.9	n.a.
Commercial photography, art, & graphics	5.0	5.9	128.3	95.0
Concession operators of amusement devices, rides	6.4	5.9	32.9	44.6
Advertising agencies	9.1	5.3	48.7	73.0
Window cleaning	6.9	5.3	-16.8	8.2
Welding repair	4.6	5.3	121.3	92.6
Sign painting shops	3.7	5.2	78.6	26.5
Top & body repair shops	4.8	5.1	135.6	84.3
Paint shops	4.9	5.1	97.4	87.7
Radiator repair	3.8	5.1	142.4	80.9
Coin-operated laundries & dry cleaning	4.6	5.0	34.4	23.2
Motion picture production except for TV	n.a.	4.8	n.a.	n.a.
Industrial laundries	5.5	4.6	24.7	46.7
Linen supply	4.3	4.6	43.4	34.6
Blue printing & photo copying services	4.3	4.6	88.5	74.9
Transmission repair shop	4.9	4.6	187.4	202.8
Watch, clock, & jewelry repair	4.7	4.6	70.3	76.0
Racing, including track operation	6.0	4.6	19.2	54.0
Power laundries, family & commercial	3.2	4.5	27.2	-8.6
Barber shops	4.7	4.5	8.5	12.1
Funeral service & crematories	4.4	4.4	26.9	27.4
Stenographic services	3.0	4.3	119.5	85.5
Temporary help supply services	3.5	4.3	215.7	153.1
Auto electrical & fuel system service	4.3	4.3	86.4	86.4
Dental laboratories	4.1	4.3	73.0	65.4
Sporting & recreational camps	3.8	4.2	15.8	NC
Photographic studios, portrait	4.4	4.2	41.2	54.3
Detective agencies & protective services	4.3	4.2	79.5	84.3
Truck rental	n.a.	4.2	46.3	n.a.
Drive-in theaters	4.1	4.2	9.3	6.5
Dry cleaning plants	4.3	4.1	3.0	7.7
Hotels, less than 25 guestrooms	3.6	4.0	13.3	3.0
Beauty shops	4.3	4.0	32.7	41.3
Outdoor advertising services	3.0	4.0	74.3	29.9
Brake, front end & wheel align.	3.1	4.0	106.2	59.2
Misc. personal service	4.0	3.9	78.4	22.6

TABLE XXIII-2. COMPARATIVE MICHIGAN SELECTED SERVICE INDUSTRY STATISTICS: 1972-1977 (cont.)

Kind of business	Michigan receipts as a percentage of U.S. receipts		Percentage increase in receipts 1972-1977	
	1972	1977	Michigan	U.S.
Membership sports & recreation clubs	n.a.	3.9	n.a.	n.a.
Adjustment & collection agencies	2.0	3.7	51.2	n.a.
Armature rewinding shops	4.0	3.7	95.3	108.7
Direct mail advertising services	3.5	3.6	63.7	56.8
Photo finishing laboratories	2.6	3.6	118.0	60.7
Sewer & septic tank cleaning services	5.5	3.6	15.2	75.4
Engineering, architectural & surveying services	3.9	3.6	76.9	94.2
Radio & TV repair shops	3.8	3.5	33.3	43.8
Motion picture theaters	3.4	3.5	54.2	51.9
Refrigeration & air cond. repair shops	2.6	3.4	139.2	81.6
Reupholstery & furniture repair	5.2	3.4	39.1	54.3
Radio, TV, & publisher's advertising	2.4	3.3	91.7	43.8
Truck leasing, exc. finance leasing	n.a.	3.3	55.8	n.a.
Electrical & electronic repair shops	3.4	3.3	109.9	114.6
Legal services	3.8	3.3	52.0	70.9
Water softening services	n.a.	3.2	29.1	n.a.
Diesel repair shops	2.8	3.2	210.9	170.2
Dance halls, studios, & schools	2.6	3.1	131.5	75.0
Trailing parks & campsites for transients	3.4	3.1	44.3	60.7
Cleaning & maintenance services	3.5	3.1	60.9	86.9
Telephone answering services	2.8	3.1	98.4	80.7
General automotive repair shops ex. diesel	3.3	3.1	60.6	72.0
Theatrical services	2.2	3.1	155.6	87.4
Billiards & pool establishments	5.0	3.1	-34.4	5.5
Professional sports clubs, managers, promoters	3.4	3.1	68.1	82.7
Parking lots	3.2	3.0	20.1	27.4
Consumer credit reporting agencies	n.a.	2.9	7.9	n.a.
Shoe repair, shoe shine, & hat cleaning shops	2.9	2.8	8.7	13.6
Coin-operated amusement devices	2.3	2.8	98.0	63.7
Computer & data processing services	2.3	2.7	152.8	120.2
Commercial testing labs.	1.6	2.7	208.6	74.6
Motels, motor hotels, & tourist courts	3.1	2.5	23.2	48.0
Tire retreating & repair shops	2.1	2.5	78.0	46.2
Management & consulting services	2.4	2.4	99.0	87.5
Farm machinery & equipment repair shops	2.3	2.4	89.5	78.6
Garment pressing	3.5	2.3	-51.7	-27.4
Others commercial recreational amusements	2.1	2.3	84.3	76.0
Hotels, 25 guestrooms or more	1.9	2.2	150.7	111.5
Employment agencies	4.2	2.2	-3.3	84.2
Parking structure	2.9	2.2	17.7	57.0
Public relation services	2.4	2.1	88.7	67.2
Motion picture film exchanges	n.a.	2.1	109.6	n.a.
Equipment rental & leasing services	4.9	2.0	48.6	115.3
Passenger car leasing exc. finance leasing	n.a.	2.0	69.4	n.a.
Laundry & garment services	n.a.	1.9	n.a.	n.a.

TABLE XXIII-2. COMPARATIVE MICHIGAN SELECTED SERVICE INDUSTRY STATISTICS: 1972-1977 (cont.)

Kind of business	Michigan receipts as a percentage of U.S. receipts		Percentage increase in receipts 1972-1977	
	1972	1977	Michigan	U.S.
Disinfecting & exterminating services	1.5	1.4	69.2	78.2
Interior designing	4.5	1.3	-55.8	47.1
Service allied to motion picture production	n.a.	1.3	51.6	n.a.
Carpet & upholstery cleaning	3.3	1.2	57.0	57.5
Carnavals, circuses, & fairs	2.8	.9	-59.1	22.5
Producers of legitimate theater	n.a.	.7	n.a.	n.a.
Amusement parks	.7	.5	85.3	150.7
Motion picture & tape production for TV	n.a.	.2	n.a.	n.a.
Commercial museums, botanical & zoological gardens	n.a.	.1	n.a.	n.a.
Total[a]	3.6	3.6	68.8	70.3

SOURCE: Bureau of the Census, 1977 Census of Selected Service Industries, Geographic Area Series, Michigan (Washington, D.C.: 1979), SC77-A-23, Table 1; a similar document for 1972; and similar documents for the United States.

a. Includes items for which separate industry data were not available.

n.a. not available.

TABLE XXIII-3. SUMMARY STATISTICS FOR SELECTED SERVICE ESTABLISHMENTS IN MICHIGAN AND THE UNITED STATES: 1947, 1954, 1958, 1963, 1967, 1972, AND 1977

		Establishments with payroll				All establishments[a]	
Year		Number	Receipts ($1,000,000)	Annual Payroll ($1,000,000)	Paid employees[b]	Number	Receipts ($1,000,000)
1947[c]	Michigan	n.a.	n.a.	130	48,315	21,376	367
	U.S.	n.a.	n.a.	4,164	2,011,661	665,475	13,296
1954	Michigan	15,127	935	267	76,449	29,699	1,016
	U.S.	375,149	21,263	6,534	2,361,821	785,589	23,508
1958	Michigan	17,653	1,256	338	93,279	38,521	1,380
	U.S.	442,584	29,001	9,006	2,889,183	975,250	32,376
1963	Michigan	20,188	1,642	424	114,614	44,412	1,793
	U.S.	504,356	41,023	12,192	3,261,514	1,061,673	44,586
1967	Michigan	19,654	2,214	647	139,436	43,214	2,397
	U.S.	521,416	55,527	17,524	3,841,174	1,187,814	60,542
1972[d]	Michigan	20,846	3,223	939	162,205	48,727	3,504
	U.S.	569,928	84,754	27,002	n.a.	1,370,637	92,815
1972[e]	Michigan	24,718	3,446	1,222	186,018	56,080	3,784
	U.S.	683,614	103,237	33,424	5,305,181	1,590,248	112,970
1977[e]	Michigan	24,921	5,882	2,059	218,851	60,550	6,389
	U.S.	725,096	164,219	56,054	6,337,275	1,834,713	179,515

SOURCE: Bureau of the Census, 1977 Census of Service Industries, Geographic Area Series, Michigan (Washington, D.C.: 1980), SC77-A-23, Table 1 and 2; and similar documents for Michigan for 1972, 1967, 1963, 1958, 1954, and 1947; and for the United States.

a. Excludes establishments with no paid employment and with annual receipts less than $1,000.

b. Week including 15 November for 1947-1963; week including 12 March for 1967 and 1972.

c. Unrevised statistics. Based upon reports from establishments with receipts of $500 or more.

d. Based on 1967 Standard Industrial Classification. Excludes dental laboratories, legal services, and architectural, engineering, and land surveying services which are included in the Census of Selected Service Industries, 1972.

e. Based on 1972 Standard Industrial Classification. Includes dental laboratories, legal services, and architectural, engineering, and land surveying services which were excluded in the Census of Business, 1967, Selected Services.

n.a.: not available.

TABLE XXIII-4. RANKING OF STATES ACCORDING TO PERCENTAGE CHANGE IN RECEIPTS OF SERVICE INDUSTRY ESTABLISHMENTS: 1972 - 1977

State	Change	State	Change	State	Change	State	Change
United States	58.9	Ohio	52.9	Mississippi	64.7	Colorado	80.3
New York	17.5	Massachusetts	53.1	Tennessee	65.4	Utah	83.1
New Mexico	40.4	Pennsylvania	58.8	Florida	65.8	Virginia	85.2
Illinois	41.5	Arkansas	59.3	Kentucky	67.8	Hawaii	86.8
Maryland	48.5	North Carolina	60.0	Oklahoma	67.9	Montana	90.4
Rhode Island	49.6	Connecticut	60.5	Arizona	68.1	North Dakota	95.2
Michigan	50.1	Minnestoa	60.6	Maine	68.3	Washington	96.6
Dist. of Columbia	51.1	South Dakota	61.7	Iowa	68.7	Louisiana	98.4
Alabama	51.4	Georgia	62.1	Kansas	68.9	Idaho	100.0
Delaware	51.5	New Hampshire	63.2	West Virginia	72.3	Texas	100.9
Vermont	52.1	Wisconsin	63.3	South Carolina	76.3	Nevada	111.9
Missouri	52.3	Indiana	63.7	Oregon	78.4	Wyoming	129.6
New Jersey	52.6	Nebraska	64.1	California	78.9	Alaska	192.4

SOURCE: Developed from U.S. Bureau of the Census, Census of Service Industries, 1977, Geographic Area Series, Alabama through Wyoming, SC77-A-1 through SC-77-A-51 (Washington, D.C.: U.S. Government Printing Office, 1979), Table 1.

TABLE XXIII-5. RANKING OF STATES ACCORDING TO RECEIPTS PER SERVICE INDUSTRY ESTABLISHMENT: 1977

State	Receipts	State	Receipts	State	Receipts	State	Receipts
Nevada	389,120	Texas	102,422	Colorado	82,391	Kentucky	66,401
Dist. of Columbia	213,284	Maryland	102,072	Minnesota	81,523	Nebraska	65,961
Hawaii	159,063	Virginia	98,290	Alabama	77,511	Oklahoma	64,570
New York	136,010	Massachusetts	95,511	Wyoming	77,343	New Hampshire	61,561
Alaska	118,070	Georgia	93,707	Oregon	75,945	Mississippi	60,888
Illinois	109,005	Delaware	93,493	Utah	73,588	North Dakota	59,534
Louisiana	106,814	Arizona	90,013	West Virginia	72,193	Iowa	57,075
Michigan	105,513	Connecticut	89,502	Rhode Island	71,517	Arkansas	56,326
Florida	104,555	Washington	86,725	Idaho	70,222	Montana	55,872
New Jersey	103,789	Missouri	86,137	North Carolina	66,941	Maine	50,505
		Tennessee	84,738	Indiana	66,913	South Dakota	48,040
						United States	97,843

SOURCE: Developed from U.S. Bureau of the Census, Census of Service Industries, 1977, Geographic Area Series, Alabama through Wyoming, SC77-A-1 through SC-77-A-51 (Washington, D.C.: U.S. Government Printing Office, 1979), Table 1.

TABLE XXIII-6. DETAILED STATISTICS FOR SERVICE INDUSTRY ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977

Kind of business	Year	Establishments with payroll					All establishments	
				Payroll ($1,000)		Paid		
		Number	Receipts ($1,000)	Entire year	First quarter	employees 12 March[a]	Number	Receipts ($1,000)
Hotels, motels, trailer parks, camps								
Hotels, motor hotels, and motels	1972	1,464	247,240	72,830	16,904	18,462	2,429	258,231
	1977	1,210	414,071	122,520	27,404	24,340	1,979	426,854
Hotels	1972	368	92,759	32,062	7,617	7,293	484	94,265
	1977	365	223,481	73,204	16,067	13,889	430	224,884
Hotels, 25 or more guest rooms	1972	232	86,176	30,482	7,265	6,792	(b)	(b)
	1977	220	216,020	71,794	15,699	13,487	(b)	(b)
Hotels, less than 25 guest rooms	1972	136	6,583	1,580	352	501	(b)	(b)
	1977	145	7,461	1,410	368	402	(b)	(b)
Motels, tourist courts, and motor hotels	1972	1,096	154,481	40,768	9,287	11,170	1,945	163,966
	1977	845	190,590	49,316	11,337	10,451	1,549	201,970
Motels, tourist courts	1972	1,037	126,015	32,500	7,307	8,968	(b)	(b)
	1977	789	147,869	36,577	8,314	7,871	(b)	(b)
Motor hotels	1972	59	28,466	8,268	1,980	2,202	(b)	(b)
	1977	56	42,721	12,739	3,023	2,580	(b)	(b)
Sporting and rec. camps	1972	126	7,187	2,327	541	522	500	10,143
	1977	88	8,554	2,347	510	356	356	11,741
Trailer parks and camps for transients	1972	91	4,232	1,154	166	129	447	9,678
	1977	85	5,977	946	171	92	404	13,962
TOTAL	1972	1,681	258,659	76,311	17,611	19,114	3,376	278,052
	1977	1,383	428,602	125,813	28,085	24,788	2,739	452,557
Personal services								
Laundry, cleaning, garment services	1972	2,506	232,504	90,537	22,028	19,185	3,380	244,520
	1977	1,875	283,116	100,399	23,340	14,589	2,535	295,645
Coin-operated laundries and dry cleaning	1972	790	35,003	7,567	1,961	2,782	1,119	40,114
	1977	609	48,668	9,960	2,555	2,438	834	53,903
Coin-operated laundries and dry cleaning stores	1972	776	31,699	6,816	1,784	2,663	(b)	(b)
	1977	589	40,162	8,473	2,215	2,307	(b)	(b)
Coin-operated laundry machine routes	1972	14	3,304	751	177	119	(b)	(b)
	1977	20	8,506	1,487	340	131	(b)	(b)

TABLE XXIII-6. DETAILED STATISTICS FOR SERVICE INDUSTRY ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

Kind of business	Year	Establishments with payroll				Paid employees 12 March[a]	All establishments	
				Payroll ($1,000)				
		Number	Receipts ($1,000)	Entire year	First quarter		Number	Receipts ($1,000)
		Personal services (cont.)						
Other laundry, cleaning and garment services	1972	1,716	197,406	82,970	20,067	16,403	2,261	204,406
	1977	1,266	234,448	90,439	20,875	12,151	1,701	241,742
Power laundries, family and commercial	1972	105	21,391	10,590	2,561	2,220	(b)	(b)
	1977	94	27,324	12,052	2,726	1,661	(b)	(b)
Dry-cleaning plants except rug cleaning	1972	1,151	75,733	30,106	7,426	7,607	(b)	(b)
	1977	831	77,972	28,013	6,646	5,195	(b)	(b)
Garment pressing and agents for laundries and dry cleaners	1972	137	6,271	1,855	442	483	(b)	(b)
	1977	57	3,027	1,067	264	196	(b)	(b)
Industrial launderers	1972	62	42,773	17,969	4,435	2,662	(b)	(b)
	1977	50	53,336	21,445	5,041	2,152	(b)	(b)
Linen supply	1972	52	40,228	18,337	4,288	2,643	(b)	(b)
	1977	55	57,699	22,211	4,863	2,170	(b)	(b)
Diaper service	1972	11	2,204	1,044	254	134	(b)	(b)
	1977	9	4,172	1,695	407	139	(b)	(b)
Carpet and upholstery	1972	133	5,751	1,916	390	376	(b)	(b)
	1977	138	9,027	3,229	619	511	(b)	(b)
Other laundry and garmet services	1972	65	3,150	1,153	261	278	(b)	(b)
	1977	32	1,891	727	219	127	(b)	(b)
Photographic studios, portrait	1972	246	25,308	7,360	1,659	1,460	1,166	33,584
	1977	268	35,290	8,779	2,026	1,150	1,286	47,409
Beauty and barber shops	1972	3448	119,624	57,218	13,645	12,709	10,664	169,897
	1977	2,951	154,400	75,016	17,746	12,119	9,527	215,479
Beauty shops	1972	3,006	107,569	51,832	12,290	11,775	6,784	128,719
	1977	2,675	139,571	68,770	16,262	11,354	6,780	170,804
Barber shops	1972	442	12,055	5,386	1,355	934	3,880	41,178
	1977	276	14,829	6,246	1,484	765	2,747	44,675
Shoe repair, shoeshine	1972	107	3,668	1,074	285	246	365	6,144
	1977	77	4,213	1,133	295	180	242	6,677
Funeral serv. crematory	1972	608	93,828	20,494	4,899	2,877	777	98,472
	1977	591	117,853	27,895	6,502	2,774	770	125,001

TABLE XXIII-6. DETAILED STATISTICS FOR SERVICE INDUSTRY ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

Kind of business	Year	Establishments with payroll					All establishments	
		Number	Receipts ($1,000)	Payroll ($1,000) Entire year	Payroll ($1,000) First quarter	Paid employees 12 March[a]	Number	Receipts ($1,000)
Personal services (cont.)								
Miscellaneous personal	1972	460	35,359	11,041	3,109	3,789	1,969	45,368
	1977	501	63,405	20,682	5,337	5,226	2,957	80,941
Reducing salons and	1972	54	8,711	2,069	564	389	(b)	(b)
health clubs, ex. res.	1977	125	24,752	7,596	1,512	1,021	(b)	(b)
Other personal serv.	1972	406	26,648	8,972	2,545	3,400	(b)	(b)
N.E.C.	1977	260	27,598	8,880	2,183	2,217	(b)	(b)
TOTAL	1972	7,375	510,291	187,724	45,625	40,266	18,321	597,985
	1977	6,263	658,277	233,904	55,246	36,038	17,317	771,152
Business services								
Advertising	1972	334	609,666	55,056	12,907	4,813	987	619,621
	1977	334	208,160	78,215	18,212	4,585	1,028	226,185
Advertising agencies	1972	223	585,786	46,558	10,905	3,755	(b)	(b)
	1977	233	167,286	65,186	15,137	3,607	(b)	(b)
Outdoor adv. services	1972	43	12,291	4,398	1,001	506	(b)	(b)
	1977	28	21,428	6,000	1,445	423	(b)	(b)
Radio, television adv.	1972	26	4,710	1,821	422	135	(b)	(b)
representatives	1977	29	10,075	3,224	785	170	(b)	(b)
Publishers' advertising	1972	18	2,900	1,040	256	84	(b)	(b)
representatives	1977	20	4,513	1,593	345	79	(b)	(b)
Miscellaneous adv.	1972	24	3,979	1,239	323	333	(b)	(b)
	1977	24	4,858	2,212	500	306	(b)	(b)
Services to dwellings,	1972	865	73,434	41,517	9,976	10,804	2,119	82,959
other buildings	1977	875	114,948	61,532	14,878	12,179	2,601	131,539
Window cleaning	1972	76	4,905	2,498	531	503	(b)	(b)
	1977	60	4,080	1,962	448	282	(b)	(b)
Disinfecting, extermina-	1972	61	7,505	3,798	893	549	(b)	(b)
ting services	1977	78	12,697	5,444	1,279	557	(b)	(b)
Other cleaning, main-	1972	728	61,024	35,221	8,552	9,752	(b)	(b)
tenance services	1977	738	98,171	54,126	13,151	11,358	(b)	(b)
Computer, data prog.	1972	215	79,827	32,385	7,126	3,457	274	80,415
	1977	352	201,832	75,918	12,225	5,890	499	204,365
Computer programming,	1972	48	7,748	4,097	910	331	(b)	(b)
software services	1977	93	27,801	12,937	2,840	730	(b)	(b)

TABLE XXIII-6. DETAILED STATISTICS FOR SERVICE INDUSTRY ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

Kind of business	Year	Establishments with payroll					All establishments	
				Payroll ($1,000)				
		Number	Receipts ($1,000)	Entire year	First quarter	Paid employees 12 March[a]	Number	Receipts ($1,000)
				Business services (cont.)				
Computer programing, software services	1972	48	7,748	4,097	910	331	(b)	(b)
	1977	93	27,801	12,937	2,840	730	(b)	(b)
Data processing, except facilities mgmt.	1972	139	55,772	22,779	5,002	2,634	(b)	(b)
	1977	203	133,541	45,645	10,562	4,055	(b)	(b)
Computer, facilities management	1972	7	(d)	(d)	(d)	(d)	(b)	(b)
	1977	20	(d)	(d)	(d)	(d)	(b)	(b)
Computer related, N.E.C.	1972	21	(d)	(d)	(d)	(d)	(b)	(b)
	1977	36	(d)	(d)	(d)	(d)	(b)	(b)
Management, consulting, public relations	1972	536	84,927	35,164	8,547	3,451	2,029	101,536
	1977	700	157,511	67,386	15,988	5,812	3,759	202,107
Mgmt. and consulting	1972	483	78,124	32,512	7,965	3,230	(b)	(b)
	1977	636	147,403	63,192	14,963	5,536	(b)	(b)
Public relations	1972	53	6,803	2,652	582	221	(b)	(b)
	1977	64	10,108	4,187	1,025	276	(b)	(b)
Equip. rental, leasing	1972	281	109,602	24,251	5,300	1,958	664	115,451
	1977	367	153,283	37,312	7,567	2,435	878	164,253
Equip. rental	1972	167	25,906	6,647	1,381	685	(b)	(b)
	1977	223	56,672	11,301	2,421	963	(b)	(b)
Equip. leasing, except finance leasing	1972	45	9,581	3,031	780	292	(b)	(b)
	1977	66	16,544	4,584	1,063	419	(b)	(b)
Leasing, rental heavy cons. equip. with op.	1972	34	14,332	3,325	514	182	(b)	(b)
	1977	33	23,229	4,540	960	253	(b)	(b)
Rental, heavy cons. with operators	1972	35	59,783	11,248	2,625	799	(b)	(b)
	1977	45	56,838	16,887	3,023	800	(b)	(b)
Other bus. services	1972	2,188	431,524	198,683	46,425	33,178	4,457	458,713
	1977	2,400	953,565	409,458	91,546	46,460	5,503	996,672
Adjustment, collection agencies	1972	173	16,191	7,058	1,713	1,063	(b)	(b)
	1977	162	24,450	10,093	2,300	1,243	(b)	(b)
Mercantile reporting agencies	1972	8	(d)	(d)	(d)	(d)	(b)	(b)
	1977	8	(d)	(d)	(d)	(d)	(b)	(b)
Consumer cr. agencies	1972	42	8,907	4,208	976	814	(b)	(b)
	1977	42	9,572	3,906	916	536	(b)	(b)
Direct mail adv.	1972	81	18,534	6,496	1,533	1,507	(b)	(b)
	1977	43	9,572	3,906	916	536	(b)	(b)

TABLE XXIII-6. DETAILED STATISTICS FOR SERVICE INDUSTRY ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

Kind of business	Year	Establishments with payroll					All establishments	
				Payroll ($1,000)				
		Number	Receipts ($1,000)	Entire year	First quarter	Paid employees 12 March[a]	Number	Receipts ($1,000)
Business services (cont.)								
Blueprinting and photo-	1972	56	9,657	3,263	731	435	(b)	(b)
copying service	1977	84	18,199	5,148	1,201	518	(b)	(b)
Steno., court reporting	1972	73	5,695	2,829	666	426	(b)	(b)
and typing	1977	96	11,826	6,072	1,446	593	(b)	(b)
Duplicating, except	1972	23	1,639	567	129	91	(b)	(b)
printing	1977	24	4,273	1,423	277	121	(b)	(b)
Commer. photo, art,	1972	224	44,467	19,355	4,459	1,696	(b)	(b)
related design	1977	283	101,539	38,385	8,597	2,367	(b)	(b)
Commer. photography	1972	87	11,596	4,197	1,017	429	(b)	(b)
	1977	87	27,006	7,631	1,673	586	(b)	(b)
Commercial art	1972	64	16,398	8,204	1,973	671	(b)	(b)
	1977	70	34,848	14,893	3,411	841	(b)	(b)
Other	1972	73	16,473	6,954	1,469	596	(b)	(b)
	1977	126	39,685	15,861	3,513	940	(b)	(b)
News syndicates	1972	5	(d)	(d)	(d)	(d)	(b)	(b)
	1977	6	(d)	(d)	(d)	(d)	(b)	(b)
Private employment	1972	176	21,159	9,339	2,152	1,433	(b)	(b)
agency	1977	184	20,471	10,351	2,131	1,012	(b)	(b)
Temp. office help,	1972	73	19,274	14,219	3,109	4,203	(b)	(b)
supply services	1977	92	41,687	30,974	6,852	6,768	(b)	(b)
Temp. help supply,	1972	40	12,376	9,468	1,866	1,813	(b)	(b)
except off. workers	1977	87	58,217	40,948	8,929	5,906	(b)	(b)
Personnel supply,	1972	23	5,100	2,582	670	485	(b)	(b)
N.E.C.	1977	16	7,305	4,771	1,015	349	(b)	(b)
Commercial research,	1972	62	21,054	11,459	2,930	986	(b)	(b)
development lab.	1977	62	197,875	52,247	10,878	2,168	(b)	(b)
Commercial testing lab.	1972	48	6,092	2,994	647	279	(b)	(b)
	1977	64	18,800	7,849	1,588	522	(b)	(b)
Detective ag. and	1972	183	44,090	33,782	8,046	8,434	(b)	(b)
guard services	1977	202	78,400	55,619	13,417	10,715	(b)	(b)
Armored car serv.	1972	42	7,606	4,275	986	596	(b)	(b)
	1977	23	14,713	8,313	2,038	848	(b)	(b)

TABLE XXIII-6. DETAILED STATISTICS FOR SERVICE INDUSTRY ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

Kind of business	Year	Establishments with payroll					All establishments	
				Payroll ($1,000)				
		Number	Receipts ($1,000)	Entire year	First quarter	Paid employees 12 March[a]	Number	Receipts ($1,000)
Business services (cont.)								
Burglar and fire alarm	1972	26	9,779	4,222	1,030	513	(b)	(b)
	1977	44	17,229	7,344	1,744	878	(b)	(b)
Photofinishing lab.	1972	63	30,773	8,620	2,114	1,181	(b)	(b)
	1977	83	67,099	19,405	4,362	1,911	(b)	(b)
Trading stamp (sales office)	1972	4	(d)	(d)	(d)	(d)	(b)	(b)
	1977	3	(d)	(d)	(d)	(d)	(b)	(b)
Sign painting shops	1972	59	3,870	1,268	300	159	(b)	(b)
	1977	39	6,910	2,428	509	209	(b)	(b)
Interior designing	1972	43	10,854	2,214	563	270	(b)	(b)
	1977	34	4,800	1,058	234	123	(b)	(b)
Telephone ans. serv.	1972	67	5,687	2,726	669	659	(b)	(b)
	1977	76	11,281	5,441	1,282	867	(b)	(b)
Water softening serv.	1972	82	13,438	3,992	945	536	(b)	(b)
	1977	86	17,260	5,306	1,146	467	(b)	(b)
Packaging and labeling	1972	35	17,351	4,742	1,133	682	(b)	(b)
	1977	37	32,472	7,621	1,753	883	(b)	(b)
Misc. bus., N.E.C.	1972	477	75,557	33,853	8,000	4,434	(b)	(b)
	1977	495	149,607	71,278	15,873	6,097	(b)	(b)
TOTAL	1972	4,419	1,388,980	387,056	90,281	57,661	10,530	1,458,695
	1977	5,028	1,789,299	729,821	165,416	77,379	14,268	1,925,121
Automotive repair, services, and garages								
Auto. repair shops	1972	2,251	246,324	70,252	16,754	8,991	3,926	272,586
	1977	2,693	514,413	148,988	34,355	12,893	4,624	558,094
General auto. repair	1972	815	82,915	21,250	5,127	2,936	1,780	97,548
	1977	942	142,536	37,123	8,966	3,711	2,048	166,884
General auto., except diesel	1972	775	76,686	19,389	4,656	2,663	(b)	(b)
	1977	879	123,172	31,894	7,751	3,297	(b)	(b)
Diesel repair shop	1972	40	6,229	1,861	471	273	(b)	(b)
	1977	63	19,364	5,229	1,215	414	(b)	(b)
Top and body repair shops	1972	739	78,401	24,563	5,974	3,190	1,190	85,922
	1977	855	169,010	59,445	13,791	4,744	1,425	202,296

TABLE XXIII-6. DETAILED STATISTICS FOR SERVICE INDUSTRY ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

Kind of business	Year	Establishments with payroil: Number	Establishments with payroil: Receipts ($1,000)	Payroll ($1,000): Entire year	Payroll ($1,000): First quarter	Paid employees 12 March[a]	All establishments: Number	All establishments: Receipts ($1,000)
Automotive repair, services, garages (cont.)								
Other auto. repair shops	1972	697	85,008	24,439	5,653	2,865	956	89,116
	1977	896	182,867	52,420	11,598	4,438	1,151	188,814
Tire retreading-rpr.	1972	55	9,998	2,528	574	307	(b)	(b)
	1977	54	17,793	4,440	978	399	(b)	(b)
Paint shop	1972	109	11,326	3,514	905	464	(b)	(b)
	1977	129	22,354	7,248	1,578	656	(b)	(b)
Auto. electrical and fuel system serv.	1972	63	5,778	1,675	392	223	(b)	(b)
	1977	75	10,773	2,973	706	298	(b)	(b)
Radiator repair	1972	66	5,933	1,688	400	247	(b)	(b)
	1977	78	14,384	3,915	824	335	(b)	(b)
Glass repl. - repair	1972	115	18,778	5,182	1,191	574	(b)	(b)
	1977	120	28,789	8,224	1,902	700	(b)	(b)
Brake, front end, and wheel alignment	1972	81	7,460	2,340	533	287	(b)	(b)
	1977	79	15,379	5,055	1,105	390	(b)	(b)
Exhaust system (muffler shops)	1972	68	11,670	2,879	576	240	(b)	(b)
	1977	104	27,432	6,901	1,387	503	(b)	(b)
Transmission repair	1972	109	10,544	3,361	819	390	(b)	(b)
	1977	215	30,302	9,289	2,182	812	(b)	(b)
Other auto. repair N.E.C.	1972	31	3,521	1,272	263	133	(b)	(b)
	1977	42	15,661	4,375	936	345	(b)	(b)
Auto. rental, leasing, without drivers	1972	270	121,147	15,296	3,828	1,822	369	124,019
	1977	291	291,439	29,608	6,624	2,257	425	295,910
Passenger car rental without drivers	1972	68	21,933	3,939	980	579	(b)	(b)
	1977	62	37,140	6,347	1,504	685	(b)	(b)
Passenger car leasing, ex. finance leasing	1973	57	25,112	2,236	535	216	(b)	(b)
	1977	57	138,609	5,745	1,449	411	(b)	(b)
Truck rental, without drivers	1972	37	23,057	2,876	730	338	(b)	(b)
	1977	53	33,758	4,768	1,095	366	(b)	(b)
Truck leasing, except finance leasing	1972	76	49,091	5,863	1,496	620	(b)	(b)
	1977	91	76,537	12,074	2,418	720	(b)	(b)
Utility and recreation vehicle rental	1972	32	1,954	372	87	69	(b)	(b)
	1977	28	5,395	674	158	69	(b)	(b)
Automobile parking	1972	324	21,707	4,577	1,175	1,085	394	22,483
	1977	235	25,866	5,869	1,398	906	283	26,975

TABLE XXIII-6. DETAILED STATISTICS FOR SERVICE INDUSTRY ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

Kind of business	Year	Establishments with payroll					All establishments	
				Payroll ($1,000)		Paid employees 12 March[a]		
		Number	Receipts ($1,000)	Entire year	First quarter		Number	Receipts ($1,000)
Automotive repair, services, garages (cont.)								
Parking lots	1972	304	13,292	3,225	823	835	(b)	(b)
	1977	209	15,963	3,355	885	629	(b)	(b)
Parking structures	1972	20	8,415	1,352	352	250	(b)	(b)
	1977	26	9,903	2,114	513	277	(b)	(b)
Auto. serv., except repair	1972	542	47,903	13,855	3,514	4,128	1,056	54,866
	1977	568	88,573	25,740	6,178	4,030	1,155	99,977
Car wash	1972	429	38,510	10,109	2,636	3,604	(b)	(b)
	1977	370	45,076	10,996	2,856	2,689	(b)	(b)
Other auto. serv.	1972	113	9,393	3,746	878	524	(b)	(b)
	1977	198	43,497	14,744	3,322	1,341	(b)	(b)
TOTAL	1972	3,387	437,081	103,970	25,271	16,026	5,745	473,954
	1977	3,787	920,291	209,805	48,555	20,086	6,487	980,956
Miscellaneous repair services								
Elec. and electronic repair shops	1972	540	59,248	20,543	4,773	2,420	1,866	73,142
	1977	607	103,859	33,405	7,893	2,978	1,773	121,917
Radio and TV repair	1972	318	31,493	9,776	2,333	1,259	1,255	41,071
	1977	332	43,294	13,321	3,140	1,327	1,119	54,743
Other elec. and electronic repair	1972	222	27,755	10,767	2,440	1,161	611	32,071
	1977	275	60,565	20,084	4,753	1,651	645	67,174
Refrigeration and air-conditioning repair	1972	88	7,839	2,592	537	250	(b)	(b)
	1977	89	18,752	5,439	1,166	404	(b)	(b)
Elec. and electronic, N.E.C.	1972	134	19,916	8,175	1,903	911	(b)	(b)
	1977	186	41,813	14,645	3,587	1,247	(b)	(b)
Reupholstery and furniture	1972	190	11,819	3,759	899	659	781	17,379
	1977	198	17,107	5,203	1,211	706	754	24,170
Other repair shops and related services	1972	877	126,164	42,098	9,707	4,587	2,296	140,096
	1977	1,095	239,635	76,899	16,930	6,152	2,716	261,719
Watch, clock, jewelry	1972	54	4,221	1,082	266	158	(b)	(b)
	1977	60	7,190	1,380	315	169	(b)	(b)
Misc. repair and related services	1972	823	121,943	41,016	9,441	4,429	(b)	(b)
	1977	1,035	232,445	75,519	16,615	5,983	(b)	(b)
Welding repair	1972	159	17,059	5,852	1,294	685	(b)	(b)
	1977	179	37,746	13,429	2,637	1,112	(b)	(b)
Armature rewinding shop	1972	90	24,207	8,143	1,898	810	(b)	(b)
	1977	90	47,286	15,482	3,542	1,011	(b)	(b)

TABLE XXIII-6. DETAILED STATISTICS FOR SERVICE INDUSTRY ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

		Establishments with payroll					All establishments	
				Payroll ($1,000)				
Kind of business	Year	Number	Receipts ($1,000)	Entire year	First quarter	Paid employees 12 March[a]	Number	Receipts ($1,000)
Miscellaneous repair services (cont.)								
Farm machinery/equip.	1972	16	1,739	574	152	72	(b)	(b)
	1977	21	3,296	973	221	81	(b)	(b)
Lawnmower, saw, knife, tool sharpening rpr.	1972	66	6,244	2,089	489	242	(b)	(b)
	1977	58	9,809	2,962	672	288	(b)	(b)
Sewer, septic tank cleaning	1972	68	6,728	2,016	437	210	(b)	(b)
	1977	53	7,750	2,731	596	198	(b)	(b)
Other rpr.-related services, N.E.C.	1972	424	65,966	22,342	5,171	2,410	(b)	(b)
	1977	634	126,558	39,942	8,947	3,293	(b)	(b)
TOTAL	1972	1,607	197,231	66,400	15,379	7,666	4,943	230,617
	1977	1,900	360,601	115,507	26,034	9,836	5,243	407,806
Amusement and recreation services, including motion pictures								
Motion picture prod. dist., services	1972	85	49,829	11,587	2,540	939	151	50,933
	1977	87	84,693	12,618	2,743	749	173	85,959
Motion picture prod., except TV	1972	26	12,878	4,523	902	280	(b)	(b)
	1977	30	25,216	6,309	1,289	317	(b)	(b)
Motion picture, tape prod. for TV	1972	12	8,175	2,864	600	253	(b)	(b)
	1977	9	2,208	577	136	37	(b)	(b)
Services allied to motion picture prod.	1972	15	6,441	2,230	531	172	(b)	(b)
	1977	14	9,742	3,402	769	199	(b)	(b)
Motion picture film ex.	1972	20	20,797	1,528	395	177	(b)	(b)
	1977	23	43,565	1,772	402	127	(b)	(b)
Film or tape dist. for TV	1972	1	(d)	(d)	(d)	(d)	(b)	(b)
	1977	2	(d)	(d)	(d)	(d)	(b)	(b)
Serv. allied to motion picture distribution	1972	11	(d)	(d)	(d)	(d)	(b)	(b)
	1977	9	(d)	(d)	(d)	(d)	(b)	(b)
Motion picture theaters	1972	362	64,964	13,465	3,034	4,481	395	65,578
	1977	341	92,607	15,715	3,536	3,565	375	94,199
Motion picture theaters, except drive-in	1972	256	48,167	10,387	2,441	3,572	(b)	(b)
	1977	238	74,253	12,568	3,051	3,148	(b)	(b)
Drive-in motion pic.	1972	106	16,797	3,078	593	909	(b)	(b)
	1977	103	18,354	3,147	485	417	(b)	(b)
Producers, orchestras, entertainers	1972	234	22,543	7,433	1,739	990	1,734	34,692
	1977	106	30,068	6,059	1,089	582	2,131	49,710

TABLE XXIII-6. DETAILED STATISTICS FOR SERVICE INDUSTRY ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

Kind of business	Year	Establishments with payroll					All establishments	
				Payroll ($1,000)		Paid employees 12 March[a]		
		Number	Receipts ($1,000)	Entire year	First quarter		Number	Receipts ($1,000)
Amusement and recreation services, including motion pictures (cont.)								
Dance bands, orchestra except symphony	1972	128	2,125	1,098	272	356	(b)	(b)
	1977	7	111	53	20	9	(b)	(b)
Symphony orchestras, other classical music, dance groups	1972	13	(d)	(d)	(d)	(d)	(b)	(b)
	1977	--	--	--	--	--	(b)	(b)
Other entertainment presentations, incl. variety	1972	30	3,560	994	223	101	(b)	(b)
	1977	46	(d)	(d)	(d)	(d)	(b)	(b)
Prod. of legitimate theater	1972	26	9,490	2,227	541	265	(b)	(b)
	1977	17	2,096	509	69	57	(b)	(b)
Prod. of radio and TV shows, except tape	1972	2	(d)	(d)	(d)	(d)	(b)	(b)
	1977	3	(d)	(d)	(d)	(d)	(b)	(b)
Theatrical services	1972	35	5,752	1,200	211	111	(b)	(b)
	1977	33	14,704	3,163	567	209	(b)	(b)
Artists' - entertainers' mgrs. or agents, concert bureaus, bkg. agents	1972	15	3,226	672	147	66	(b)	(b)
	1977	18	6,871	1,565	220	79	(b)	(b)
Other theatrical serv.	1972	20	2,526	528	64	45	(b)	(b)
	1977	15	7,833	1,598	347	130	(b)	(b)
Bowling alleys, billiards and pool	1972	477	93,866	25,532	6,615	6,888	1,110	101,124
	1977	446	138,829	38,542	10,313	9,131	550	141,942
Billiard and pool establishments	1972	70	2,999	801	203	215	316	5,725
	1977	38	2,862	764	202	203	83	3,756
Bowling alleys	1972	407	90,867	24,731	6,412	6,673	794	95,399
	1977	408	135,967	37,778	10,111	8,928	467	138,186
Other amusement and rec. services	1972	1,301	220,701	70,033	13,553	9,080	2,509	233,696
	1977	1,110	263,003	70,841	14,067	7,975	2,911	288,030
Dance halls, studios, and schools	1972	76	2,306	779	217	316	(b)	(b)
	1977	95	5,134	1,803	471	467	(b)	(b)
Public dance halls or ballrooms	1972	6	(d)	(d)	(d)	(d)	(b)	(b)
	1977	7	1,072	352	63	71	(b)	(b)
Dance schools, inc. childrens and profess.	1972	70	(d)	(d)	(d)	(d)	(b)	(b)
	1977	88	4,062	1,451	408	396	(b)	(b)

TABLE XXIII-6. DETAILED STATISTICS FOR SERVICE INDUSTRY ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

Kind of business	Year	Establishments with payroll					All establishments	
				Payroll ($1,000)				
		Number	Receipts ($1,000)	Entire year	First quarter	Paid employees 12 March[a]	Number	Receipts ($1,000)
				Amusement and recreation services (cont.)				
Commercial sports	1972	127	77,561	19,903	4,991	1,259	(b)	(b)
	1977	89	100,968	28,447	5,501	1,389	(b)	(b)
Profess. sports clubs, mgrs., promoters	1972	18	17,389	9,693	2,173	376	(b)	(b)
	1977	19	29,225	13,951	3,826	642	(b)	(b)
Baseball clubs	1972	2	(d)	(d)	(d)	(d)	(b)	(b)
	1977	3	(d)	(d)	(d)	(d)	(b)	(b)
Football clubs	1972	1	(d)	(d)	(d)	(d)	(b)	(b)
	1977	2	(d)	(d)	(d)	(d)	(b)	(b)
Other profess. sports	1972	11	7,360	3,392	1,387	129	(b)	(b)
	1977	6	(d)	(d)	(d)	(d)	(b)	(b)
Managers and promoters	1972	4	813	386	107	108	(b)	(b)
	1977	8	645	178	69	51	(b)	(b)
Racing, incl. track operation	1972	109	60,172	10,210	2,818	883	(b)	(b)
	1977	70	71,743	14,496	1,675	747	(b)	(b)
Racetrack operation	1972	47	56,447	9,036	2,553	679	(b)	(b)
	1977	25	65,950	12,772	1,305	509	(b)	(b)
Auto racetrack oper.	1972	36	4,097	687	75	219	(b)	(b)
	1977	21	(d)	(d)	(d)	(d)	(b)	(b)
Horse racetrack oper.	1972	11	52,380	8,349	2,478	460	(b)	(b)
	1977	4	(d)	(d)	(d)	(d)	(b)	(b)
Dog racetrack oper.	1972	(b)	(b)	(b)	(b)	(b)	(b)	(b)
	1977	--	--	--	--	--	--	--
Racing stables, racing, N.E.C.	1972	62	3,695	1,174	265	204	(b)	(b)
	1977	45	5,793	1,724	370	238	(b)	(b)
Public golf course, except municipal	1972	194	19,349	5,402	599	483	(b)	(b)
	1977	210	32,805	8,991	1,043	587	(b)	(b)
Membership sports and recreation clubs	1972	367	73,781	31,140	5,045	4,719	(b)	(b)
	1977	195	45,273	13,493	2,600	1,910	(b)	(b)
Coin-operated amusement device	1972	61	6,970	1,576	383	235	(b)	(b)
	1977	78	13,803	3,072	755	383	(b)	(b)
Amusement parks	1972	18	3,039	1,024	93	72	(b)	(b)
	1977	25	5,632	1,550	112	92	(b)	(b)
Concession operators of amusement devices, rides	1972	36	7,197	1,765	319	187	(b)	(b)
	1977	38	9,567	1,364	206	120	(b)	(b)
Carnivals, circuses	1972	9	2,008	329	70	6	(b)	(b)
	1977	3	934	105	16	10	(b)	(b)

TABLE XXIII-6. DETAILED STATISTICS FOR SERVICE INDUSTRY ESTABLISHMENTS IN MICHIGAN, BY KIND OF BUSINESS: 1972 AND 1977 (cont.)

		Establishments with payroll					All establishments	
				Payroll ($1,000)				
Kind of business	Year	Number	Receipts ($1,000)	Entire year	First quarter	Paid employees 12 March[a]	Number	Receipts ($1,000)
				Amusement and recreation services (cont.)				
Fairs	1972	27	2,443	577	49	50	(b)	(b)
	1977	7	785	312	20	6	(b)	(b)
Other comm. rec. and amusements	1972	386	26,047	7,538	1,787	1,753	(b)	(b)
	1977	362	47,862	11,659	3,325	2,999	(b)	(b)
TOTAL	1972	2,459	451,903	128,050	27,481	22,378	5,899	486,023
	1977	2,090	609,200	143,775	31,748	22,002	6,140	659,837
				Dental laboratories				
TOTAL	1972	181	21,047	8,773	1,971	1,113	336	23,572
	1977	222	37,321	15,592	3,632	1,367	389	40,788
				Legal services				
TOTAL	1972	2,650	369,949	103,516	22,800	9,342	4,723	409,845
	1977	3,236	573,526	212,227	47,344	13,312	5,562	622,848
				Architectural, engineering, and land surveying services				
Architectural serv.	1972	310	72,025	36,871	8,995	2,764	(b)	(b)
	1977	331	104,436	48,597	11,150	2,612	(b)	(b)
Engineering serv.	1972	513	194,358	113,480	25,646	8,590	(b)	(b)
	1977	522	378,177	212,394	46,089	10,604	(b)	(b)
Land-surveying serv.	1972	136	17,443	9,752	2,152	1,098	(b)	(b)
	1977	159	22,152	11,746	2,304	824	(b)	(b)
TOTAL	1972	959	283,826	160,103	36,793	12,452	2,207	298,315
	1977	1,012	504,765	272,737	59,543	14,043	2,405	527,767
TOTAL SEL. SERV.	1972	24,718	3,918,967	1,221,903	283,212	186,018	56,080	4,257,058
	1977	24,921	5,881,882	2,059,181	465,603	218,851	60,550	6,388,832

SOURCE: Bureau of the Census, 1972 Census of Selected Service Industries, Area Series, Michigan (Washington, D.C.: 1974), SC72-A-23, Table 1; and Bureau of the Census, 1977 Census of Service Industries, Geographic Area Series, Michigan (Washington, D.C.: 1980), SC77-A-23, Table 1.

a. Week including 12 March.

b. Data not provided because establishments with no payroll are classified only at the next broader kind-of-business level.

d. Data witheld to avoid disclosing figures for individual companies.

N.E.C.: not elsewhere classified.

TABLE XXIII-7. SUMMARY STATISTICS FOR SERVICE INDUSTRY ESTABLISHMENTS IN MICHIGAN, BY COUNTY: 1972 AND 1977

		Establishments with payroll					All establishments	
				Payroll ($1,000)		Paid		
County	Year	Number	Receipts ($1,000)	Entire year	First quarter	employees 12 March[a]	Number	Receipts ($1,000)
Alcona	1972	16	869	344	70	86	70	1,467
	1977	17	1,000	244	63	45	66	1,690
Alger	1972	29	1,213	160	37	47	84	1,594
	1977	21	1,354	219	44	37	85	2,122
Allegan	1972	151	11,621	3,198	642	566	427	14,382
	1977	151	17,029	4,211	929	659	472	20,999
Alpena	1972	102	5,771	1,819	380	397	229	7,014
	1977	95	14,904	3,399	760	493	261	16,914
Antrim	1972	39	4,547	1,440	375	384	122	5,302
	1977	39	6,485	2,217	540	435	145	7,741
Arenac	1972	34	1,790	356	82	69	79	2,185
	1977	26	2,193	456	98	91	91	2,888
Baraga	1972	13	658	156	38	39	48	989
	1977	16	1,404	399	67	652	50	1,805
Barry	1972	74	3,457	821	196	318	224	4,998
	1977	60	3,933	1,002	252	204	222	6,290
Bay	1972	269	24,427	7,348	1,809	1,532	689	28,381
	1977	274	41,118	13,299	2,974	1,551	678	46,608
Benzie	1972	45	1,771	428	66	83	94	2,258
	1977	41	3,833	796	192	175	110	4,989
Berrien	1972	487	52,351	15,380	3,473	3,250	1,198	59,413
	1977	475	70,436	22,452	5,192	3,245	1,301	80,673
Branch	1972	96	7,302	1,548	352	365	242	8,847
	1977	90	12,656	2,192	467	269	282	15,003
Calhoun	1972	393	38,972	13,470	3,167	2,631	868	44,114
	1977	365	52,244	18,664	4,421	2,564	869	58,860
Cass	1972	86	3,587	864	162	190	246	5,068
	1977	79	7,458	1,983	452	352	256	9,904
Charlevoix	1972	77	7,286	2,016	586	448	164	8,147
	1977	75	10,032	2,653	841	608	195	11,243
Cheboygan	1972	115	4,794	1,379	218	227	232	5,749
	1977	113	7,620	2,040	340	260	240	9,145
Chippewa	1972	110	6,229	1,630	345	371	278	7,408
	1977	114	9,851	2,925	604	471	273	11,965

TABLE XXIII-7. SUMMARY STATISTICS FOR SERVICE INDUSTRY ESTABLISHMENTS IN MICHIGAN, BY COUNTY: 1972 AND 1977 (cont.)

County	Year	Establishments with payroll					All establishments	
				Payroll ($1,000)				
		Number	Receipts ($1,000)	Entire year	First quarter	Paid employees 12 March[a]	Number	Receipts ($1,000)
Clare	1972	50	3,949	931	231	168	141	4,868
	1977	48	4,974	1,213	323	241	185	6,740
Clinton	1972	87	5,092	1,248	282	277	268	6,864
	1977	81	10,959	3,677	849	418	275	13,324
Crawford	1972	51	3,176	993	204	222	84	3,604
	1977	42	4,014	1,026	255	210	92	4,853
Delta	1972	118	8,092	2,013	413	510	261	9,166
	1977	108	10,740	3,424	762	492	283	12,692
Dickinson	1972	86	5,748	1,576	361	451	173	6,483
	1977	81	9,810	2,929	774	488	188	10,819
Eaton	1972	144	7,997	2,138	509	430	424	10,826
	1977	148	16,745	5,012	1,165	725	467	20,861
Emmet	1972	129	13,179	3,563	891	860	251	14,412
	1977	127	20,406	5,572	1,456	982	277	22,309
Genesee	1972	1,126	127,132	42,968	9,920	7,446	2,328	139,586
	1977	1,072	182,797	64,245	14,897	8,136	2,348	201,774
Gladwin	1972	30	1,276	234	36	59	94	1,918
	1977	27	2,058	560	135	87	103	3,015
Gogebic	1972	69	4,420	1,070	359	416	159	5,165
	1977	69	7,359	2,104	723	559	160	8,405
Grand Traverse	1972	216	19,805	5,867	1,258	1,028	437	21,934
	1977	246	40,787	12,775	2,815	1,739	607	45,383
Gratiot	1972	95	5,545	1,444	346	326	235	6,831
	1977	80	7,569	1,771	468	293	262	9,682
Hillsdale	1972	84	3,966	1,083	238	258	248	5,553
	1977	83	9,047	2,414	543	328	264	11,471
Houghton	1972	88	5,843	1,306	326	360	214	7,056
	1977	89	10,011	2,261	542	417	240	11,787
Huron	1972	98	4,717	1,258	405	369	252	6,228
	1977	83	5,845	1,309	296	214	285	8,148
Ingham	1972	797	109,319	38,456	8,754	6,361	1,730	118,874
	1977	525	174,177	62,520	13,586	6,800	2,088	190,402
Ionia	1972	85	4,310	1,121	221	224	266	6,083
	1977	85	6,481	1,639	369	285	290	9,332

TABLE XXIII-7. SUMMARY STATISTICS FOR SERVICE INDUSTRY ESTABLISHMENTS IN MICHIGAN, BY COUNTY: 1972 AND 1977 (Cont.)

		Establishments with payroll					All establishments	
				Payroll ($1,000)				
County	Year	Number	Receipts ($1,000)	Entire year	First quarter	Paid employees 12 March[a]	Number	Receipts ($1,000)
Iosco	1972	81	3,103	704	144	208	234	4,594
	1977	84	5,448	1,452	315	238	226	7,852
Iron	1972	41	2,946	812	186	194	110	3,580
	1977	38	4,408	1,184	290	169	119	5,396
Isabella	1972	98	8,183	2,575	564	628	260	9,711
	1977	111	15,033	5,072	1,131	675	274	16,825
Jackson	1972	371	35,164	11,104	2,642	2,153	902	40,181
	1977	348	121,588	49,373	10,501	4,198	931	129,746
Kalamazoo	1972	581	78,318	26,240	6,034	4,448	1,324	85,823
	1977	645	137,600	45,459	10,231	5,605	1,526	148,406
Kalkaska	1972	15	464	105	13	31	49	785
	1977	25	2,442	771	155	93	81	3,150
Kent	1972	1,276	191,971	64,460	15,339	10,950	2,718	208,102
	1977	1,372	300,160	107,269	24,834	13,834	3,046	325,513
Keweenaw	1972	9	502	137	8	21	20	582
	1977	9	339	80	90	6	21	466
Lake	1972	21	548	117	26	34	55	817
	1977	13	620	91	19	14	60	1,473
Lapeer	1972	104	6,825	2,153	474	338	261	8,287
	1977	109	10,102	2,826	661	402	369	13,565
Leelanau	1972	55	4,205	1,317	285	252	123	5,079
	1977	40	4,708	1,464	378	276	139	5,819
Lenawee	1972	231	17,396	5,482	1,249	1,193	602	20,886
	1977	217	24,431	6,477	1,482	1,045	631	29,760
Livingston	1972	131	12,189	3,649	839	774	351	14,485
	1977	173	37,039	9,680	2,590	1,491	500	41,558
Luce	1972	28	903	190	52	48	69	1,249
	1977	26	1,673	375	84	78	63	2,062
Mackinac	1972	93	6,941	1,987	171	150	199	7,766
	1977	69	11,705	3,145	264	150	155	12,788
Macomb	1972	1,450	185,291	68,248	15,392	9,543	3,161	204,489
	1977	1,710	498,837	160,160	35,372	14,645	3,937	537,503
Manistee	1972	62	3,994	1,022	236	276	178	4,935
	1977	71	6,761	1,679	369	255	192	8,049

TABLE XXIII-7. SUMMARY STATISTICS FOR SERVICE INDUSTRY ESTABLISHMENTS IN MICHIGAN, BY COUNTY: 1972 AND 1977 (cont.)

		Establishments with payroll					All establishments	
				Payroll ($1,000)		Paid		
County	Year	Number	Receipts ($1,000)	Entire year	First quarter	employees 12 March[a]	Number	Receipts ($1,000)
Otsego	1972	65	6,244	2,017	542	461	126	6,921
	1977	66	12,182	3,667	840	576	157	13,386
Ottawa	1972	293	26,650	7,947	1,754	1,576	719	30,965
	1977	324	500,949	16,670	3,810	2,235	926	59,246
Presque Isle	1972	35	1,393	294	75	85	92	1,826
	1977	31	1,723	478	114	69	110	2,669
Roscommon	1972	75	2,914	800	159	147	238	4,312
	1977	65	3,419	771	169	124	248	5,663
Saginaw	1972	572	70,659	23,012	5,432	4,111	1,145	76,792
	1977	577	104,423	33,723	7,888	4,296	1,225	112,914
St. Clair	1972	300	25,785	8,515	1,874	1,549	802	31,016
	1977	285	33,477	10,262	2,490	1,576	809	40,523
St. Joseph	1972	126	10,039	2,554	590	543	355	12,037
	1977	125	13,709	3,608	838	547	363	16,823
Sanilac	1972	67	3,042	713	151	175	237	4,889
	1977	74	5,935	1,266	248	171	285	8,357
Schoolcraft	1972	45	1,891	358	56	87	96	2,335
	1977	48	3,545	754	138	113	90	3,929
Shiawassee	1972	137	13,346	3,329	717	589	376	15,802
	1977	123	15,298	4,400	1,000	596	390	18,742
Tuscola	1972	83	3,633	1,121	263	270	256	5,263
	1977	82	5,005	1,149	265	179	307	7,678
Van Buren	1972	144	14,301	3,332	750	549	368	16,271
	1977	122	25,850	6,029	1,206	676	390	29,281
Washtenaw	1972	665	113,277	42,992	9,596	5,701	1,726	124,101
	1977	778	227,925	95,431	21,720	8,335	2,297	246,699
Wayne	1972	7,180	1,740,721	503,581	117,622	72,650	15,006	1,831,365
	1977	6,040	1,761,451	645,932	147,090	67,073	12,865	1,867,446
Wexford	1972	79	6,181	1,763	483	465	166	7,498
	1977	96	11,714	3,376	830	601	215	13,533
TOTAL	1972	24,718	3,918,967	1,221,903	283,212	186,018	56,080	4,257,058
	1977	24,921	5,881,882	2,059,181	465,603	218,851	60,550	6,388,832

SOURCE: Bureau of the Census, 1972 Census of Selected Service Industries, Area Statistics, Michigan (Washington, D.C.: 1974), SC72-A-23, Table 5; and Bureau of the Census, 1977 Census of Service Industries, Geographic Area Series, Michigan (Washington, D.C.: 1980), SC77-A-23, Table 7.

a. Week including 12 March.

TABLE XXIII-8. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN SERVICE INDUSTRY ESTABLISHMENTS AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979

	Labor and proprietors' earnings in services			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Emmet	29.70	32,902	29.62	37,055
Leelanau	21.28	6,166	25.32	8,604
Crawford	21.98	6,761	25.03	7,379
Oakland	20.98	1,622,165	20.79	1,843,150
Grand Traverse	20.32	68,131	20.62	78,311
Mackinac	19.73	7,618	19.60	8,355
Wexford	16.68	19,594	17.16	22,648
Baraga	14.57	4,671	16.85	5,936
Otsego	14.69	11,135	16.64	14,647
Clare	15.18	8,480	16.53	10,514
Kalamazoo	15.84	237,631	16.36	278,954
Gogebic	(D)	(D)	16.24	10,619
Lake	17.60	2,167	16.03	2,148
Cheboygan	15.22	11,223	15,93	13,655
Houghton	15.41	18,720	15.69	21,006
Kent	15.15	475,278	14.98	547,767
Bay	14.19	82,359	14.70	92,824
Gratiot	14.47	28,935	14.68	31,453
Jackson	15.48	139,383	14.67	145,846
Wayne	13.70	2,888,088	14.07	3,170,840
Ingham	13.61	354,930	14.05	414,596
St. Clair	13.13	73,011	13.61	80,132
Berrien	12.89	129,145	13.50	143,553
Washtenaw	13.08	321,715	13.50	372,286
Benzie	17.39	6,446	13.47	5,522
Monroe	11.17	51,850	13.39	67,582
Chippewa	12.87	12,864	13.05	13,889
Calhoun	12.75	124,997	12.95	138,949
Delta	13.22	22,065	12.92	24,010
Montcalm	12.08	21,900	12.76	25,043
Muskegon	12.42	111,122	12.74	126,107
Ogemaw	13.81	5,944	12.73	6,733
Isabella	12.26	25,404	12.60	28,714
Keweenaw	12.24	638	12.53	684
Livingston	12.74	31,052	12.53	36,045
Gladwin	14.49	5,408	12.47	5,674
Eaton	12.04	21,809	12.24	24,937
Lenawee	12.22	53,386	12.19	60,095
Ottawa	11.09	88,453	12.01	110,123
Roscommon	11.03	4,362	11.92	5,357

TABLE XXIII-8. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN SERVICE INDUSTRY ESTABLISHMENTS AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979 (cont.)

	Labor and proprietors' earnings in services			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Shiawassee	12.92	29,809	11.92	31,982
Arenac	11.67	4,164	11.80	4,797
Newaygo	11.13	10,549	11.70	11,790
Van Buren	10.59	22,582	11.54	27,141
Mason	11.53	12,523	11.41	14,080
Macomb	10.93	493,481	11.39	551,191
Oceana	10.20	5,890	11.09	6,966
Saginaw	10.79	186,816	11.08	209,224
Alcona	11.92	1,992	10.99	2,182
Huron	11.01	17,613	10.68	19,657
Iron	(D)	(D)	10.50	5,191
Mecosta	9.93	10,359	10.43	12,061
Barry	10.23	12,773	10.36	14,734
Alpena	9.93	16,197	10.31	18,660
Oscoda	9.07	1,258	10.06	1,521
Genessee	9.74	378,557	10.12	421,098
Midland	9.97	59,995	9.99	67,371
Sanilac	9.65	13,688	9.66	15,656
Manistee	9.39	9,281	9.63	10,436
Lapeer	8.57	18,706	9.37	22,086
Clinton	9.05	10,836	9.29	12,583
Allegan	9.33	23,759	9.24	26,094
Hillsdale	8.94	15,217	9.10	17,325
Alger	9.93	2,966	8.83	2,914
Cass	9.09	15,226	8.67	15,590
Dickinson	(D)	(D)	8.13	13,949
Iosco	7.68	9,030	8.12	10,330
Tuscola	8.41	15,976	8.07	17,799
Ionia	7.48	14,141	7.88	15,939
Osceola	6.85	4,102	6.80	4,565
Branch	6.84	14,696	6.52	15,747
Missaukee	7.15	1,574	6.44	1,698
St. Joseph	6.50	17,771	6.42	20,288
Montmorency	5.45	1,109	6.16	1,323
Menominee	6.88	6,664	6.11	6,704
Kalkaska	5.46	2,130	5.48	2,384

TABLE XXIII-8. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN SERVICE INDUSTRY ESTABLISHMENTS AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1979 (cont.)

	Labor and proprietors' earnings in services			
	1978		1979	
County	As a percentage of total labor and proprietors' earnings	Total ($000)	As a percentage of total labor and proprietors' earnings	Total ($000)
Ontonagon	4.58	2,344	5.20	2,977
Antrim	(D)	(D)	(D)	(D)
Charlevoix	(D)	(D)	(D)	(D)
Luce	(D)	(D)	(D)	(D)
Marquette	11.62	48,686	(D)	(D)
Presque Isle	(D)	(D)	(D)	(D)
Schoolcraft	8.01	2,599	(D)	(D)
Michigan	13.81	8,710,266	14.2	9,788,946
United States	16.86	222,745,000	17.1	25,369,000

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

NOTE: Counties are ranked according to this sector's relative contribution to total labor and proprietors' earnings (next-to-last column). These numbers pertain to earnings generated within the county, irrespective of the residence of the people who received them. For a complete tabulation of earnings at the state level, see Table VI-2 and VI-3. The earnings residence adjustment for all industries is shown in Table VI-12.

(D): Withheld to avoid disclosing data for individual companies.

TABLE XXIII-9. RANKING OF MICHIGAN COUNTIES ACCORDING TO PERCENTAGE CHANGE IN LABOR AND PROPRIETORS' EARNINGS IN SERVICE INDUSTRY ESTABLISHMENTS AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1978-1979

	Percentage change			Percentage change	
County	1974-1979	1978-1979	County	1974-1979	1978-1979
Otsego	132	32	Kalkaska	94	12
Monroe	105	30	Macomb	102	12
Baraga	90	27	Manistee	96	12
Ontonagon	108				
Ontonagon	108	27	Mason	77	12
Clare	92	24	Midland	100	12
Ottawa	103	24	Newaygo	59	12
Roscommon	114	23	Saginaw	74	12
Cheboygan	118	22	Berrien	68	11
Oscoda	66	21	Calhoun	71	11
Van Buren	97	20	Genesee	80	11
Montmorency	124	19	Leelanau	67	11
Lapeer	82	18	Osceola	61	11
Oceana	91	18	Tuscola	63	11
Ingham	86	17	Alcona	77	10
Kalamazoo	105	17	Allegan	60	10
Clinton	81	16	Mackinac	72	10
Livingston	124	16	St. Clair	66	10
Mecosta	93	16	Wayne	52	10
Washtenaw	112	16	Crawford	84	9
Wexford	105	16	Delta	75	9
Alpena	79	15	Gratiot	67	9
Arenac	59	15	Chippewa	96	8
Barry	72	15	Missaukee	44	8
Grand Traverse	104	15	Branch	68	7
Kent	79	15	Keweenaw	(D)	7
Eaton	80	14	Shiawassee	61	7
Hillsdale	77	14	Gladwin	61	5
Iosco	76	14	Jackson	59	5
Montcalm	69	14	Cass	71	2
Oakland	109	14	Menominee	36	1
Sanilac	72	14	Lake	(-35)	(-1)
St. Joseph	60	14	Alger	51	(-2)
Bay	72	13	Benzie	(D)	(-14)
Emmet	78	13	Antrim	(D)	(D)
Ionia	73	13	Charlevoix	(D)	(D)
Isabella	79	13	Dickinson	(D)	(D)
Lenewee	59	13	Gogebic	75	(D)
Muskegon	69	13	Iron	(D)	(D)
Ogemaw	82	13	Luce	(D)	(D)
Houghton	85	12	Marquette	(D)	(D)
Huron	48	12	Schoolcraft	(D)	(D)
			Presque Isle	(D)	(D)
			Michigan	76	12
			United States	74	14

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

(D): Withheld to avoid disclosing data for individual companies.

The first Survey of the Origin of Exports by Manufacturing Establishments was organized in response to public and congressional requests for information on the geographic source of manufactured goods sold to customers in other countries. The survey has been repeated at three-year intervals since the first one, for 1960, was completed.

The Bureau of the Census sends copies of the reporting form to more than 20,000 manufacturing establishments with 100 or more employees. Establishments with exports valued at $25,000 or more, f.o.b. plant, are asked to report their exports. These replies are the basis for the geographic allocation of reported export shipments by the manufacturers themselves.

Estimated values of exports, f.o.b. producing plant, for each state or Standard Metropolitan Statistical Area represent the sum of reported exports and exports unknown to the manufacturer; for example, exports handled through a wholesaler. The latter figures are calculated on the basis of the geographical distribution of total manufacturing employment, since there is no survey of middlemen to make that determination.

Other foreign trade statistics are compiled by the Bureau of Customs, U.S. Department of Commerce. These figures represent the flow through Michigan and other states.

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TABLE XXIV-1. VALUE OF EXPORT SHIPMENTS BY MANUFACTURING ESTABLISHMENTS IN MICHIGAN AND THE UNITED STATES AND IN MICHIGAN STANDARD METROPOLITAN STATISTICAL AREAS, F.O.B. PRODUCING PLANT: 1963, 1966, 1969, 1971, 1972, AND 1977

(In millions of dollars)

Area	1963	1966	1969	1971	1972	1977
Estimated[a]						
Michigan	1,116.3	1,568.2	2,613.1	2,834.0	3,522.2	6,937.4
United States	16,472.6	21,299.2	29,210.0	33,132.3	36,608.0	85,795.9
Reported[b]						
Michigan	836.4	1,250.0	2,018.1	2,127.7	2,562.0	n.a.
United States	11,003.7	14,952.9	20,403.3	22,813.8	25,510.6	67,387.5
Standard Metropolitan Statistical Area:						
Ann Arbor	n.a.	47.9	111.7	173.4	196.7	n.a.
Bay City	n.a.	3.3	7.2	18.8	21.9	n.a.
Detroit	489.7	726.1	1,191.1	1,602.2	1,847.9	n.a.
Flint	n.a.	(c)	(d)	(e)	(e)	n.a.
Grand Rapids	32.1	51.7	55.4	111.3	131.6	n.a.
Jackson	n.a.	19.3	26.4	39.4	44.8	n.a.
Kalamazoo-Portage	n.a.	22.1	36.8	56.2	60.2	n.a.
Lansing-East Lansing	n.a.	79.1	118.1	117.2	122.2	n.a.
Muskegon-Muskegon Heights-Norton Shores	n.a.	20.7	24.5	95.1	88.2	n.a.
Saginaw	n.a.	17.1	45.4	76.1	78.8	n.a.

SOURCE: Bureau of the Census, Current Industrial Reports, Series M161, 1960 and 1963 (discontinued in 1963) and Series MA161, 1966, 1969, 1971, and 1972 (Washington, D.C.: periodically), MA161(72)-2, Tables 3 and 4 (1972); and 1977 Census of Manufacturers, Origin of Exports of Manufactured Products (Washington, D.C.: 1981), Subject Series MC77-SR-12, Table 3a and Appendix B.

a. Reported value of exports by manufacturers plus the value of exports handled through wholesalers or other purchasers whose intention to export the products was not known to the manufacturer.
b. Value of known exports from a survey of firms with 100 or more employees, exporting $25,000 or more.
c. $50 million or over but less than $100 million.
d. $100 million or over but less than $200 million.
e. More than $200 million.
n.a.: not available.

TABLE XXIII-7. SUMMARY STATISTICS FOR SERVICE INDUSTRY ESTABLISHMENTS IN MICHIGAN, BY COUNTY: 1972 AND 1977 (cont.)

County	Year	Establishments with payroll					All establishments	
		Number	Receipts ($1,000)	Payroll ($1,000) Entire year	Payroll ($1,000) First quarter	Paid employees 12 March[a]	Number	Receipts ($1,000)
Marquette	1972	151	9,596	2,504	575	630	342	11,332
	1977	172	19,062	5,806	1,342	906	386	21,274
Mason	1972	84	5,260	1,558	324	308	184	6,415
	1977	85	7,417	1,884	436	370	203	9,119
Mecosta	1972	50	3,722	943	182	190	150	4,544
	1977	53	5,470	1,624	330	221	185	6,886
Menominee	1972	53	2,739	701	168	189	152	3,621
	1977	45	5,216	1,373	417	358	174	6,748
Midland	1972	139	30,168	9,738	2,347	1,416	321	31,835
	1977	141	26,971	9,899	2,169	1,281	463	30,195
Missaukee	1972	12	286	57	9	9	43	628
	1977	14	802	152	27	23	53	1,322
Monroe	1972	199	17,071	5,168	1,058	952	526	20,258
	1977	220	36,084	9,590	2,095	1,243	596	40,321
Montcalm	1972	91	4,856	1,022	241	274	271	6,627
	1977	80	5,618	1,210	327	270	291	8,039
Montmorency	1972	17	633	199	38	50	66	1,054
	1977	21	1,181	515	104	39	81	1,791
Muskegon	1972	372	32,384	10,146	2,262	2,010	903	37,498
	1977	361	53,091	15,971	3,730	2,111	892	58,820
Newaygo	1972	58	2,495	663	157	153	184	3,517
	1977	48	2,574	719	150	91	173	3,902
Oakland	1972	3,336	693,733	235,115	55,067	28,522	7,298	744,398
	1977	4,300	1,455,128	529,690	118,358	46,587	9,559	1,547,424
Oceana	1972	46	1,929	532	90	95	127	2,584
	1977	41	3,450	874	191	162	147	4,549
Ogemaw	1972	42	2,517	777	76	69	108	3,189
	1977	39	7,670	1,027	196	102	125	8,626
Ontonagon	1972	23	979	217	61	90	70	1,470
	1977	18	1,235	248	64	88	81	2,033
Osceola	1972	26	812	176	35	51	98	1,768
	1977	29	2,946	765	121	103	129	4,197
Oscoda	1972	17	559	131	32	43	54	819
	1977	13	542	160	24	21	55	925

TABLE XXIV-2. VALUE OF EXPORT SHIPMENTS BY MANUFACTURING PLANTS IN MICHIGAN AND THE UNITED STATES, BY INDUSTRY GROUP, F.O.B. PRODUCING PLANT: 1969, 1971, 1972, AND 1977

(In millions of dollars)

Industry group	Michigan				United States			
	1969	1971	1972	1977	1969	1971	1972	1977
Food and kindred products	50.2	59.7	61.1	153.4	2,150.0	2,715.8	3,046.2	6,782.2
Paper and allied products	13.4	20.1	16.8	29.3	790.0	949.8	988.4	2,099.5
Chemicals and allied products	141.6	122.5	180.3	404.5	3,049.0	3,519.7	3,756.8	9,466.1
Rubber and plastics products	13.2	15.1	35.3	62.1	387.8	452.3	519.3	1,410.8
Stone, clay, and glass products	27.1	35.9	48.9	75.9	341.6	377.5	408.7	997.0
Primary metal industries	109.4	111.8	126.1	196.4	1,782.0	1,435.6	1,490.2	2,791.6
Fabricated metal products[a]	190.1	244.1	312.2	514.3	1,180.6	1,296.6	1,429.3	4,125.2
Nonelectrical machinery	474.1	459.1	464.2	985.5	6,021.1	7,061.4	7,823.6	19,142.1
Electrical equipment and supplies	82.0	103.4	131.2	188.3	2,480.0	2,714.8	3,295.8	8,060.9
Transportation equipment[b]	1,417.5	1,529.9	1,736.1	4,107.1	6,174.4	7,571.2	7,841.7	17,711.9
Instruments and related products	17.7	(c)	27.8	63.4	1,086.8	1,343.1	1,530.9	4,235.1
All other	76.8	132.4[d]	382.4	157.2	3,756.7	3,694.5	4,477.1	8,973.5
TOTAL	2,613.1	2,834.0	3,522.2	6,937.4	29,210.0	33,132.3	36,608.0	85,795.9

SOURCE: Bureau of the Census, *Current Industrial Reports*, Series MA161, 1969 and 1972 (Washington, D.C.: periodically), MA161(72)-2, Table 2 (1971 and 1972 data); and *1977 Census of Manufacturers, Origin of Exports of Manufactured Products* (Washington, D.C.: 1981), Subject Series MC77-SR-12, Tables 4a and 5a.

a. Definition expanded in 1967 to include captive automotive stampings plants of motor vehicle manufacturers.
b. Definition contracted in 1967 to exclude captive automotive stampings plants of motor vehicle manufacturers.
c. $25 million to $50 million.
d. Includes instruments and related products.

TABLE XXIV-4. VALUE OF IMPORTS AND EXPORTS PASSED THROUGH THE DETROIT CUSTOMS DISTRICT AND THE UNITED STATES, VESSEL AND AIR SHIPMENTS AND TOTAL: 1971-1980

(In millions of dollars)

Year	Total		Vessel		Air	
	Detroit	United States	Detroit	United States	Detroit	United States
			General imports			
1971	5,131.2	45,562.8	483.3	27,036.0	36.2	4,014.7
1972	5,901.4	55,582.8	495.2	33,665.6	56.8	5,194.4
1973	6,829.5	69,475.7	465.2	42,601.7	72.9	6,929.7
1974[a]	8,466.1	100,972.3	504.4	67,165.2	87.8	8,921.7
1975[a]	8,205.1	96,104.4	470.2	63,224.3	70.6	8,841.9
1976[a]	10,280.5	120,677.4	705.0	80,758.7	74.7	10,847.0
1977[a]	11,483.1	146,816.7	999.8	100,854.2	72.6	12,491.4
1978	12,728.1	173,249.9	805.4	115,499.0	81.0	17,923.1
1979	13,748.8	207,131.1	881.5	140,924.1	110.2	22,168.7
1980	12,721.6	240,834.3	628.6	165,147.5	136.3	28,044.2
			Exports of domestic and foreign merchandise			
1971	4,892.2	44,129.9	175.6	22,829.3	75.4	6,296.9
1972	5,848.2	49,778.2	141.0	25,758.0	94.2	7,516.0
1973	7,036.5	71,338.8	195.6	39,853.8	161.1	10,303.6
1974[a]	8,707.3	98,507.2	226.9	55,904.8	198.6	13,781.2
1975[a]	9,751.1	107,651.8	249.4	61,801.1	167.5	14,554.6
1976[a]	10,889.1	114,997.2	283.9	64,868.8	184.1	16,905.5
1977[a]	12,115.5	120,163.2	354.2	65,596.5	212.1	19,660.3
1978	13,366.2	143,662.7	578.1	77,530.8	229.7	25,896.7
1979	14,210.1	181,801.6	789.0	97,788.4	171.3	36,660.6
1980	14,633.9	220,704.9	785.1	119,085.8	181.4	45,405.0

SOURCE: Bureau of the Census, Highlights of U.S. Export and Import Trade, December 1971 through December 1980 (Washington, D.C.: monthly), Tables I-15 and E-4 (December 1980).

a. Transaction value of imports at the foreign port of exportation, including costs to place it alongside the ship, or f.a.s. (free alongside ship) value. For prior years the figures and customs values, which generally represented the value in the foreign country for collection of import duties.

TABLE XXIV-5. WEIGHT OF WATERBORNE IMPORTS AND EXPORTS PASSED THROUGH THE DETROIT CUSTOMS DISTRICT BY PORT: 1974-1979

(Millions of pounds)

	Imports						Exports					
Port	1974	1975	1976	1977	1978	1979	1974	1975	1976	1977	1978	1979
Detroit	6,452	7,445	9,986	10,225	5,903	5,567	1,343	1,199	902	881	1,410	1,422
Port Huron	51	34	504	748	637	952	10	2	10	12	648	751
Sault Ste. Marie	12	0	37	52	35	42	703	596	440	637	608	439
Saginaw-Bay City	251	157	437	496	313	540	536	592	438	443	721	962
Muskegon	39	24	133	113	135	39	10	1	8	31	12	0
Grand Haven	0	32	94	52	102	69	0	46	9	0	0	0
Rogers City	33	0	34	0	32	0	1,964	1,616	1,386	1,868	2,587	2,425
Detour	0	0	1	29	56	0	466	853	901	735	797	1,176
Escanaba	0	0	0	0	57	2	0	860	958	396	787	689
Presque Isle	0	0	0	29	0	0	0	0	2,366	1,854	2,773	4,447
Alpena	176	4	216	58	27	45	2,283	3,340	3,302	3,007	2,259	3,523
Ferrysburg	104	37	39	38	7	119	0	0	0	0	0	0
TOTAL	7,118	7,733	11,481	11,840	7,298	7,378	7,315	9,106	10,717	9,864	12,601	15,833

SOURCE: Bureau of the Census, Waterborne Exports and General Imports, 1974 through 1979 (Washington, D.C.: annual), FT 985-78-13, Tables I-1 and E-1 (1979).

XXV. OTHER ENTERPRISE STATISTICS

This chapter includes material that cannot easily be categorized within the other chapters relating to business in Michigan. Statistics on patents and on research and development activities of businesses are collected and published by various agencies of the federal government.

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TABLE XXV-1. NUMBER, BUSINESS RECEIPTS, PAYROLLS, DEPRECIATION, AND NET PROFITS OF NONFARM PROPRIETORSHIPS IN MICHIGAN AND THE UNITED STATES: 1965-1977

		Thousands of dollars			
Year	Number	Business receipts	Payrolls	Depreciation	Net profit
		Michigan			
1965	229,649	6,720,734	792,371	181,681	1,130,182
1966	215,769	7,632,329	865,609	193,124	1,160,758
1967	214,644	8,221,935	996,612	191,016	1,264,783
1968	219,172	8,203,156	1,038,499	209,713	1,318,421
1969	229,493	8,261,634	1,007,738	n.a.	1,325,899
1970	221,780	7,953,693	939,301	n.a.	1,232,920
1971	241,718	8,245,805	955,840	n.a.	1,240,018
1972	246,562	8,748,695	1,018,386	239,825	1,372,904
1973	257,408	9,362,591	1,114,025	274,870	1,542,548
1974	261,798	9,893,119	1,076,543	288,916	1,458,146
1975	264,716	9,892,274	1,090,173	303,934	1,418,023
1976	275,597	10,392,873	1,087,828	317,160	1,503,054
1977	n.a.	n.a.	n.a.	n.a.	n.a.
		United States			
1965	5,855,257	167,032,214	19,251,839	4,348,078	24,145,658
1966	5,901,571	171,643,054	19,653,340	4,481,983	25,504,318
1967	5,925,935	175,660,827	20,138,994	4,677,045	26,621,637
1968	5,998,610	184,617,439	21,229,554	4,779,256	28,299,606
1969	6,155,374	193,894,487	22,364,904	n.a.	29.739,427
1970	6,313,259	195,792,289	22,362,930	n.a.	30,022,920
1971	6,612,225	211,193,510	23,513,831	n.a.	31,516,479
1972	6,957,436	224,128,750	24,466,884	6,071,144	33,911,098
1973	7,445,153	248.785,404	26,924,663	6,862,388	38,058,018
1974	7,688,795	264,802,830	27,391,496	7,470,131	38,980,898
1975	7,759,576	273,954,741	29,018,942	7,958,143	39,636,453
1976	8,139,962	301,446,844	31,494,376	8,536,390	44,424,787
1977	8,413,806	324,492,975	32,533,568	9,541,552	49,436,518

SOURCE: Internal Revenue Service, Statistics of Income, Business Income Tax Returns, Sole Proprietorships and Partnerships (Washington, D.C.: annually), Table 1.4.

n.a.: not available.

TABLE XXV-2. NUMBER, BUSINESS RECEIPTS, PAYROLLS, DEPRECIATION, AND NET PROFITS OF PARTNERSHIPS IN MICHIGAN AND THE UNITED STATES: 1965-1977

		Thousands of dollars			
Year	Number	Business receipts	Payrolls	Depreciation	Net profit
Michigan					
1965	30,763	2,989,223	384,357	75,163	406,845
1966	31,662	2,953,941	380,274	98,563	402,722
1967	30,935	2,95[illegible],666	411,458	95,772	419,930
1968	31,721	3,065,198	410,656	111,077	447,845
1969	31,374	3,204,[illegible]84	411,487	n.a.	396,754
1970	31,859	2,802,157	354,031	n.a.	252,589
1971	n.a.	n.a.	n.a.	n.a.	n.a.
1972	33,413	3,269,015	370,382	192,886	273,833
1973	34,408	3,856,285	455,088	241,160	298,961
1974	36,592	4,302,715	490,288	266,340	249,977
1975	35,537	4,289,002	476,074	324,096	253,272
1976	36,013	4,285,667	459,319	326,919	257,583
1977	n.a.	n.a.	n.a.	n.a.	n.a.
United States					
1965	786,558	68,595,859	9,384,714	2,162,066	9,027,981
1966	796,116	72,808,301	9,805,683	2,361,243	9,656,194
1967	780,885	72,515,107	10,169,459	2,599,921	10,216,025
1968	795,495	75,213,174	10,617,664	2,903,298	10,756,354
1969	800,391	80,009,120	11,148,745	n.a.	9,788,097
1970	811,845	82,982,213	11,558,441	n.a.	9,122,597
1971	n.a.	n.a.	n.a.	n.a.	n.a.
1972	876,150	95,435,014	12,587,899	5,296,742	8,889,094
1973	915,994	109,476,011	13,595,004	6,382,308	7,929,218
1974	952,175	125,780,194	14,961,016	7,785,440	7,973,323
1975	964,052	134,511,262	16,179,238	9,197,292	7,000,900
1976	974,763	144,822,904	17,840,359	9,889,016	9,450,489
1977	1,047,719	164,823,196	9,032,168	11,298,382	12,664,554

SOURCE: Internal Revenue Service, Statistics of Income, Business Income preliminary Table 5. Tax Returns, Sole Proprietorships and Partnerships (Washington, D.C.: annually), Table 2.4.

TABLE XXV-3. NUMBER OF FRANCHISE ESTABLISHMENTS IN MICHIGAN AND THE UNITED STATES, BY TYPE OF BUSINESS: 1976, 1977, AND 1978

		Michigan			United States		
Kind of business	Year	Company owned	Franchisee owned	Total	Company owned	Franchisee owned	Total
Convenience stores	1976	139	116	255	8,401	4,504	12,905
	1977	118	136	254	9,067	4,846	13,913
	1978	191	106	297	9,471	4,604	14,075
Fast food restaurants	1976	470	1,400	1,870	10,080	27,470	37,550
	1977	611	1,337	1,948	12,932	31,857	44,789
	1978[a]	506	1,602	2,108	13,993	35,170	49,163
Retailing (nonfood)	1976	237	814	1,051	8,027	27,253	35,280
	1977	241	806	1,047	8,104	27,876	35,980
	1978	269	590	859	8,329	21,445	30,284
Hotels and motels	1976	27	92	119	1,010	3,905	4,915
	1977	25	84	109	913	3,985	4,898
	1978	26	105	131	978	4,139	5,117
Campgrounds	1976	0	32	32	20	1,019	1,039
	1977	0	31	31	18	960	978
	1978	0	28	28	18	949	967
Employment services	1976	18	62	80	604	2,267	2,871
	1977	18	85	103	n.a.	n.a.	n.a.
	1978	20	92	112	910	2,820	3,730
Printing and copying services	1976	9	56	65	129	1,367	1,496
	1977	11	79	90	127	1,706	1,833
	1978	11	115	126	128	2,181	2,309
Rental services (equipment)	1976	0	47	47	171	1,236	1,407
	1977	1	46	47	156	1,254	1,410
	1978	0	45	45	153	1,339	1,492
Real estate	1976	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	1977	36	462	498	115	9,622	9,737
	1978	40	729	769	162	13,863	14,025

SOURCE: U.S. Department of Commerce, Industry and Trade Administration, Franchising in the Economy, 1977-1979 (Washington, D.C.: 1979), Tables 33, 36, 41, 50, 58, 60, 62, 77, and 80; and similar documents for previous years.

a. 1978 figure is restaurants (all types).

n.a.: not available.

TABLE XXIV-3. FACTORY SHIPMENTS AND EMPLOYMENT RELATED TO MANUFACTURED EXPORTS, BY MAJOR INDUSTRY GROUP, MICHIGAN AND THE UNITED STATES: 1977

	Value of mfg. shipments Millions of dollars			Percentage[a]		Mfg. employment Thousands			Percentage[b]	
Industry group or products	Direct	Supporting	Total	Michigan	United States	Direct	Supporting	Total	Michigan	United States
Food and kindred	153.4	75.1	228.5	4.1	4.8	.8	.6	1.4	3.0	3.7
Textile mill	8.8	7.1	15.9	8.1	8.0	.1	.1	.2	7.6	7.6
Apparel, other textile	78.7	53.6	132.3	7.5	3.1	1.0	.7	1.7	6.6	2.0
Lumber and wood	12.1	32.7	44.8	6.5	9.0	.4	.7	1.1	7.3	7.3
Furniture and fixtures	21.2	9.2	30.4	2.7	1.9	.4	.2	.6	2.7	1.7
Paper and allied	29.3	112.9	142.2	7.0	9.4	.2	1.3	1.5	6.4	8.5
Printing and publishing	8.8	5.2	24.0	1.6	2.3	.1	.3	.4	1.1	1.9
Chemical and allied	404.5	201.9	606.4	16.1	14.3	3.5	1.9	5.4	15.9	13.7
Petroleum and coal	3.8	21.1	24.9	2.3	3.0	--	--	--	--	3.6
Rubber, misc. plastic	62.1	98.3	160.4	8.9	9.0	1.0	1.9	2.9	8.1	8.8
Leather and leather products	2.6	2.4	5.0	3.4	4.4	--	--	--	--	2.2
Stone, clay, glass	75.9	54.6	130.5	9.0	6.4	1.2	.7	1.9	9.4	6.5
Primary metal	196.4	921.1	1,117.5	15.8	15.5	2.5	10.8	13.3	16.0	15.4
Fabricated metal	547.3	834.5	1,348.8	14.3	10.5	7.5	12.4	19.9	13.9	10.4
Machinery, not elec.	985.5	497.7	1,483.2	16.3	20.1	12.9	8.9	21.8	14.9	18.4
Electric, electronic equipment	188.3	82.5	270.8	13.0	13.6	2.5	1.5	4.0	11.7	14.1
Transportation equip.	4,107.1	997.5	5,104.6	11.5	13.1	32.1	7.3	39.4	12.2	14.0
Instruments and related	63.4	15.0	78.4	14.4	16.9	1.3	.3	1.6	13.7	17.6
Misc. mfg. industries	20.4	5.8	26.2	5.6	8.6	.5	.1	.6	5.5	6.6
Central admin. offices, auxiliary	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	14.3	14.3	13.6	10.9
Total	6,937.4	4,037.9	10,975.3	11.7	10.4	68.5	64.2	132.7	11.9	10.2

SOURCE: Bureau of the Census, 1977 Census of Manufactures, Origin of Exports of Manufactured Products (Washington D.C.: 1981), Subject Series, MC77-SR-12, Tables 4a and 5a.

a. Total export related shipments as a percentage of total manufacturers' shipments.

b. Total export related employment as a percentage of total manufacturing employment.

c. Less than one-half of the unit of measurement shown.

N.A.: not applicable.

TABLE XXV-4. EXPENDITURES FOR INDUSTRIAL RESEARCH AND DEVELOPMENT IN MICHIGAN AND THE UNITED STATES, BY SOURCE OF FUNDING: 1963-1977 AND 1979

(In millions of dollars)

Date	Federal funds		Mich. as a % of U.S.	Company funds		Mich. as a % of U.S.
	Michigan	United States		Michigan	United States	
1963	65	7,270	.89	797	5,360	14.87
1964	65	7,600	.85	835	5,753	14.51
1965	67	7,740	.86	895	6,445	13.89
1966	98	8,287	1.18	977	7,254	13.47
1967	115	8,388	1.39	952	8,032	11.85
1968	98	8,559	1.14	1,086	8,876	12.23
1969	83	8,619	.96	1,228	9,856	12.46
1970	77	7,785	.99	1,171	10,073	11.62
1971	78	7,671	1.02	1,338	10,643	12.57
1972	86	8,090	1.06	1,500	11,347	13.22
1973	56	8,222	.68	1,832	12,699	14.43
1974	78	8,332	.94	1,990	14,038	14.18
1975	114	8,765	1.30	1,858	14,776	12.57
1976	124	9,285	1.33	2,248	17,391	12.93
1977	144	10,545	1.37	2,614	19,362	13.50
1979	n.a.	12,460	n.a.	3,589[a]	25,493	n.a.

SOURCE: National Science Foundation, Research and Development in Industry, 1966 through 1975 (Washington, D.C.: annually), NS76-322, Table B-23 (1977), and National Science Foundation, Basic Research, Applied Research, and Development in Industry, 1964 (Washington, D.C.: 1966), NS66-28, Table 26; and special release.

NOTE: The bulk of expenditures for industrial research and development are for development and made by manufacturing industries.

a. Includes federal funds.

n.a.: not available.

TABLE XXV-5. NEW INCORPORATIONS IN MICHIGAN: 1958-1979

Year	Profit	Nonprofit	Foreign (out of state)	Total
1958	3,900	1,272	404	5,576
1959	4,812	1,209	527	6,548
1960	4,800	1,261	499	6,560
1961	4,788	1,312	497	6,597
1962	5,135	1,243	601	6,979
1963	5,102	1,241	528	6,871
1964	5,825	1,256	593	7,674
1965	6,152	1,286	627	8,065
1966	6,315	1,356	640	8,311
1967	6,341	1,361	715	8,417
1968	7,700	1,588	825	10,113
1969	9,586	1,767	1,064	12,417
1970	8,378	1,782	1,054	11,214
1971	8,270	1,993	1,082	11,345
1972	9,202	2,134	1,175	12,511
1973	9,709	1,878	1,093	12,680
1974	9,342	2,106	1,009	12,457
1975	9,996	2,138	926	13,060
1976	11,545	2,080	972	14,597
1977	13,273	2,082	956	16,311
1978	14,538	2,148	1,039	17,725
1979	18,654	2,217	1,062	21,933
1980	16,931	2,503	1,077	20,511

SOURCE: Michigan Department of Management and Budget, *Economic Report of the Governor*, *1981* (Lansing: 1981), Table C-18.

TABLE XXV-6. U.S. PATENTS ISSUED TO RESIDENTS OF MICHIGAN AND THE UNITED STATES: 1966-1980

Year	Michigan	United States	Year	Michigan	United States
1966	3,675	57,700	1974	3,215	57,812
1967	3,306	54,191	1975	2,832	49,494
1968	2,968	48,804	1976	2,691	51,808
1969	3,160	53,422	T.Q.	621	11,368
1970	2,831	49,821	1977	2,474	47,292
1971	3,386	58,693	1978	2,373	44,482
1972	3,156	54,093	1979	1,875	34,383
1973	3,091	54,690	1980	2,130	38,134

SOURCE: Patent and Trademark Office, *Commissioner of Patents and Trademarks*, *Annual Report*, *Fiscal Year: 1980* (Washington, D.C.: 1981), Table 6.

NOTE: 1966-1973 are calendar years and do not include reissues; 1974-1975 are fiscal years and include reissues. T..Q. = transitionary quarter, 1 July 1976 - 30 September 1976.

MICHIGAN'S STANDARD METROPOLITAN STATISTICAL AREAS

The concept of the "standard metropolitan statistical area" has been developed to meet the need for the presentation of statistics. The following excerpts from the U.S. Census of Population: 1960 and U.S. Census of Population: 1970 describe the purpose of the SMSAs.

"It has long been recognized that for many types of social and economic analysis it is necessary to consider as a unit the entire population in and around the city whose activities form an integrated social and economic system.... To permit all Federal statistical agencies to utilize the same areas for the publication of general-purpose statistics, the Office of Management and Budget has established 'standard metropolitan statistical areas' (SMSAs)."

"Except in New England, an SMSA is a county or group of contiguous counties which contains at least one city of 50,000 inhabitants or more or 'twin cities' with a combined population of at least 50,000. In addition to the county, or counties, containing such a city or cities, contiguous counties are included in an SMSA if, according to a certain criteria, they are essentially metropolitan in character and are socially and economically integrated with the central city."

"The Bureau of the Census recognizes 243 Standard Metropolitan Statistical Areas (SMSAs) in the United States and 4 in Puerto Rico, making a total of 247 in the 1970 census. These include the 231 SMSAs as defined and named in the Bureau of the Budget publication, Standard Metropolitan Statistical Areas: 1967, U.S. Government Printing Office, Washington, D.C. 20402. Since 1967, 16 SMSAs have been added, of which 2 were defined in January 1968 and an additional 14 were defined in February 1971 on the basis of the 1970 census.

Users of this statistical abstract will find that certain tables pertain to areas in Michigan which are SMSAs.

Michigan's Standard Metropolitan Statistical Areas for 1940, 1950, 1967, 1971, and 1973 were composed as follows:

MICHIGAN SMSAs, COUNTIES INCLUDED

SMSA	1940[a]	1950	1967	1971	1973
Ann Arbor-Ypsilanti			Washtenaw	Washtenaw	Washtenaw
Battle Creek				Calhoun	Calhoun Barry
Bay City[b]		Bay	Bay	Bay	Bay

APPENDIX I

MICHIGAN SMSAs, COUNTIES INCLUDED (cont.)

SMSA	1940[a]	1950	1967	1971	1973
Detroit	Macomb Oakland Wayne	Macomb Oakland Wayne	Macomb Oakland Wayne	Macomb Oakland Wayne	Lapeer Livingston Macomb Oakland St. Clair Wayne
Flint	Genesee	Genesee	Genesee	Genesee Lapeer	Genesee Shiawassee
Grand Rapids	Kent	Kent	Kent	Kent Ottawa	Kent Ottawa
Jackson		Jackson	Jackson	Jackson	Jackson
Kalamazoo-Portage	Kalamazoo	Kalamazoo	Kalamazoo	Kalamazoo	Kalamazoo Van Buren
Lansing-East Lansing	Ingham	Ingham	Ingham Clinton Eaton	Ingham Clinton Eaton	Ingham Ionia Clinton Eaton
Muskegon-Norton Shores-Muskegon Heights			Muskegon	Muskegon	Muskegon
Saginaw[b]	Saginaw	Saginaw	Saginaw	Saginaw	Saginaw

SOURCE: U.S. Bureau of the Census, *U.S. Census of Population: 1940, 1950, 1960, and 1970*; Bureau of the Budget, *Metropolitan Statistical Areas*.

NOTE: Because of changes in designation of individual areas from Metropolitan Areas in 1940 to Standard Metropolitan Areas (SMSAs) for the 1950 census, to Standard Metropolitan Statistical Areas for the 1960 census, and changes in the SMSAs since 1960, the census data presented by SMSAs are not strictly comparable.

a. The designation was changed from Metropolitan Area to Standard Metropolitan Area just prior to the 1950 census. It finally was standardized as Standard Metropolitan Statistical Area in 1959.

b. Saginaw and Bay City were classified in the 1940 census as the Metropolitan Area of Saginaw-Bay City Which was Composed of Bay and Saginaw counties.

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